STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 116268

TO: James Schultz **Location: rem/2d18/2c18** **Art Unit: 1635** **Monday, March 08, 2004** **Case Serial Number: 10/016149**	**From: David Schreiber** **Location: Biotech-Chem Library** **Remsen E01A61** **Phone: 272-2526** **david.schreiber@uspto.gov**

Search Notes

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SEARCH REQUEST FORM

Requestor's Name: _____ Serial Number: _____

Date: _____ Phone: _____ Art Unit: _____

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).

STAFF USE ONLY

Date completed: 3/8

Searcher: D. Schwadron 272-2526

Terminal time: 115

Elapsed time: 16 (PM)

CPU time: _____

Total time: _____

Number of Searches: _____

Number of Databases: _____

Search Site

_____ STIC

_____ ~~CM-1~~ Remsen EIC ACI

_____ Pre-S

Type of Search

21 N.A. Sequence

_____ A.A. Sequence

_____ Structure

_____ Bibliographic

Vendors

_____ IG

_____ STN

_____ Dialog

_____ APS

_____ Geninfo

_____ SDC

_____ DARC/Questel

✓ Other (Compugen Excel)

PTO-1590 (9-90)

Schreiber, David 116268

From: Schultz, James
Sent: Tuesday, February 24, 2004 4:10 PM
To: Schreiber, David
Subject: Seq Search 10/016,149

Hi David,
I need to order a "length over score" nucleotide sequence search on nucleotides 506 through 903 of SEQ ID NO: 3. I need the lower and upper limits to be 8 and 50, respectively, I need those hits complementary to the 70% level, and please transfer as many hits into the excel program as possible. If you can search the interference databases this way, please do.
Thanks,
Doug Schultz

James Douglas Schultz, PhD
AU 1635 (Biotechnology)
Patent Examiner
United States Patent and Trademark Office
(Office) REM 2D18
(Mail) REM 2C18
(571) 272-0763

STIC SEARCH RESULTS FEEDBACK FORM

USPTO

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library Remsen Bldg.

sira
Search and Information Resources Administration

OM nucleic - nucleic search, using sw model

Run on: March 8, 2004, 14:05:14 ; Search time 2 Seconds
(without alignments)
3.719 Million cell updates/sec

Title: us-10-016-149-3
Perfect score: 398
Sequence: 1 acaacccacagtaccaatac.....gatgcacttacttctcagct 398

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 536 seqs, 9344 residues

Total number of hits satisfying chosen parameters: 1072

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 537 summaries

Database : rng.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
c	1	33.2	8.3	38	1	AAL50618	Lipoprotein denatu
c	2	22	5.5	22	1	AAQ81143	HPLA2-10 gene PCR
	3	20	5.0	20	1	ABL43299	Human chromosome 1
c	4	20	5.0	20	1	ACC82862	Human PLA2 antisen
c	5	20	5.0	20	1	ACC82842	Human PLA2 antisen
c	6	20	5.0	20	1	ACC82861	Human PLA2 antisen
c	7	20	5.0	20	1	ACC82834	Human PLA2 antisen
c	8	20	5.0	20	1	ACC82841	Human PLA2 antisen
c	9	20	5.0	20	1	ACC82849	Human PLA2 antisen
c	10	20	5.0	20	1	ACC82866	Human PLA2 antisen
c	11	20	5.0	20	1	ACC82844	Human PLA2 antisen
c	12	20	5.0	20	1	ACC82852	Human PLA2 antisen
c	13	20	5.0	20	1	ACC82837	Human PLA2 antisen
c	14	20	5.0	20	1	ACC82865	Human PLA2 antisen
c	15	20	5.0	20	1	ACC82847	Human PLA2 antisen
c	16	20	5.0	20	1	ACC82858	Human PLA2 antisen
c	17	20	5.0	20	1	ACC82860	Human PLA2 antisen
c	18	20	5.0	20	1	ACC82840	Human PLA2 antisen
c	19	20	5.0	20	1	ACC82848	Human PLA2 antisen
c	20	20	5.0	20	1	ACC82845	Human PLA2 antisen
c	21	20	5.0	20	1	ACC82855	Human PLA2 antisen
c	22	20	5.0	20	1	ACC82857	Human PLA2 antisen
c	23	20	5.0	20	1	ACC82846	Human PLA2 antisen
c	24	20	5.0	20	1	ACC82851	Human PLA2 antisen
c	25	20	5.0	20	1	ACC82853	Human PLA2 antisen
c	26	20	5.0	20	1	ACC82864	Human PLA2 antisen
c	27	20	5.0	20	1	ACC82835	Human PLA2 antisen
c	28	20	5.0	20	1	ACC82839	Human PLA2 antisen
c	29	20	5.0	20	1	ACC82843	Human PLA2 antisen
c	30	20	5.0	20	1	ACC82859	Human PLA2 antisen
c	31	20	5.0	20	1	ACC82836	Human PLA2 antisen
c	32	20	5.0	20	1	ACC82863	Human PLA2 antisen
c	33	20	5.0	20	1	ACC82838	Human PLA2 antisen
c	34	20	5.0	20	1	ACC82850	Human PLA2 antisen
c	35	20	5.0	20	1	ACC82854	Human PLA2 antisen
c	36	20	5.0	20	1	ACC82856	Human PLA2 antisen
	37	17.6	4.4	24	1	AAZ29972	Primer aga2 used t
	38	17.6	4.4	25	1	ACI83926	Human microarray D
	39	17.6	4.4	25	1	ACI24821	Human microarray D
	40	16.8	4.2	20	1	AAT48683	Probe for detectin
	41	16.8	4.2	20	1	AAT48676	Probe for detectin
	42	16.8	4.2	20	1	AAV73036	Human ras oncogene
c	43	16.8	4.2	20	1	AAV73135	Human ras oncogene
	44	16.8	4.2	20	1	AAV73031	Human ras oncogene
	45	16.6	4.2	23	1	AAZ88731	Plasmid pBD64 PCR
	46	16.4	4.1	19	1	ABZ76989	Bovine DGAT PCR pr
	47	16.4	4.1	19	1	ABZ76950	Bovine DGAT BAC-DN
	48	16.4	4.1	20	1	AAX32376	Rat endothelin-1 (
c	49	16.4	4.1	20	1	ABZ90373	Human oligonucleot
c	50	16.4	4.1	23	1	ACF79767	Reporter probe REP
c	51	16	4.0	20	1	ABZ93825	Human oligonucleot
c	52	15.8	4.0	19	1	ABK94030	Endothelin convert
c	53	15.8	4.0	20	1	AAV73130	Human ras oncogene
	54	15.8	4.0	20	1	ADE52676	dnaform38861 PCR p
c	55	15.8	4.0	22	1	ABZ30698	Candida albicans G
c	56	15.6	3.9	22	1	AAT69828	Rat farnesyl trans
	57	15.4	3.9	17	1	ABV90403	Human POSHL1 scann
c	58	15.4	3.9	19	1	AAV39569	Mass spectrometric
c	59	15.4	3.9	19	1	AAZ71816	Human biallelic ma
c	60	15.4	3.9	20	1	AAX96605	PCR primer used to
c	61	15.4	3.9	21	1	ABK65743	Human single nucle
	62	15.4	3.9	21	1	ABK49534	Human factor VIII,
c	63	15.2	3.8	20	1	AAQ39134	HCV sense primer X
	64	15.2	3.8	20	1	AAT48681	Probe for detectin
	65	15.2	3.8	20	1	AAT48677	Probe for detectin
	66	15.2	3.8	20	1	AAT48682	Probe for detectin
	67	15.2	3.8	20	1	AAT48675	Probe for detectin
	68	15.2	3.8	20	1	AAV73035	Human ras oncogene
c	69	15.2	3.8	20	1	AAV73136	Human ras oncogene
	70	15.2	3.8	20	1	AAV73029	Human ras oncogene
	71	15.2	3.8	20	1	AAV73030	Human ras oncogene
c	72	15.2	3.8	20	1	AAV73134	Human ras oncogene
	73	15.2	3.8	20	1	AAV73037	Human ras oncogene
c	74	15.2	3.8	20	1	AAV73128	Human ras oncogene
	75	15.2	3.8	20	1	ABL45060	Human chromosome 1
	76	15.2	3.8	20	1	ABI93352	Capture oligonucle
	77	15.2	3.8	20	1	ABT33824	Human DNA MeTase D
	78	15.2	3.8	20	1	ABT33852	DNMT3a oligonucleo
	79	15.2	3.8	20	1	ABT33822	Human DNA MeTase D
c	80	15.2	3.8	20	1	ACA90208	Novel human protei
	81	15.2	3.8	21	1	AAZ11784	Oligonucleotide pr
c	82	15.2	3.8	21	1	AAC83339	Primer 6A4N2. Uni
	83	15.2	3.8	21	1	ABN84011	Zebrafish foggy wi
c	84	15	3.8	19	1	ADE65750	Human c-fos siNA 1
	85	15	3.8	19	1	ADE65634	Human c-fos transc
c	86	14.8	3.7	18	1	AAT56759	Mouse TNF-alpha ha
	87	14.8	3.7	19	1	AAA84990	Cyclin G1 ribozyme
	88	14.8	3.7	19	1	AAH60152	Cyclin G1 ribozyme
	89	14.8	3.7	20	1	AAX36894	Human XLIS gene fr
	90	14.8	3.7	20	1	ABK40432	Forward PCR primer
c	91	14.8	3.7	20	1	ABL44750	Human chromosome 1
	92	14.8	3.7	20	1	ABX03479	Negative-sense sin
	93	14.8	3.7	20	1	ABZ87363	Human oligonucleot
c	94	14.8	3.7	20	1	ABZ86597	Human oligonucleot
	95	14.8	3.7	20	1	ABZ86534	Human oligonucleot
c	96	14.8	3.7	20	1	ABZ85870	Human oligonucleot
c	97	14.8	3.7	20	1	ADE52683	dnaform60441 PCR p
	98	14.8	3.7	21	1	AAZ69986	Human biallelic ma
c	99	14.8	3.7	21	1	AAF96342	Human gene single
	100	14.4	3.6	17	1	ABV90402	Human POSHL1 scann
	101	14.4	3.6	17	1	ABV90404	Human POSHL1 scann
	102	14.4	3.6	19	1	AAX10202	Human biallelic po
c	103	14.4	3.6	20	1	AAX26537	PCR primer P11. S
c	104	14.4	3.6	20	1	AAA41205	Human TNFalpha ant
c	105	14.4	3.6	20	1	AAH48261	Heart muscle cell
c	106	14.4	3.6	20	1	AAH49627	Myocyte enhancer f

c	107	14.4	3.6	20	1	AAH44392	MEF-2D PCR primer
c	108	14.4	3.6	20	1	ABA98527	Tumour necrosis fa
	109	14.4	3.6	20	1	ABZ92024	Human oligonucleot
	110	14.4	3.6	20	1	ACD26260	Human p53 sequenci
c	111	14.4	3.6	20	1	ACD05433	Tumour necrosis fa
c	112	14.2	3.6	19	1	AAX23858	Acanthamoeba sp. 1
	113	14.2	3.6	19	1	ABL44142	Human chromosome 1
	114	14.2	3.6	20	1	AAQ14871	Oligonucleotide #1
c	115	14.2	3.6	20	1	AAQ53125	Gene detection seq
c	116	14.2	3.6	20	1	AAV26597	IBDV segment A ant
	117	14.2	3.6	20	1	AAV20061	N-ras probe 683C.
c	118	14.2	3.6	20	1	AAX25676	Human endogenous r
c	119	14.2	3.6	20	1	AAV73129	Human ras oncogene
	120	14.2	3.6	20	1	AAA93137	Clone vc65_1 secre
c	121	14.2	3.6	20	1	AAK95036	Human cDNA clone-s
	122	14.2	3.6	20	1	AAS06996	Primer BETH-R used
	123	14.2	3.6	20	1	AAD40838	Human hepsin antis
c	124	14.2	3.6	20	1	ABL59021	Nucleotide sequenc
	125	14.2	3.6	20	1	AAD40656	Human hepsin antis
	126	14.2	3.6	20	1	ABZ90449	Human oligonucleot
	127	14.2	3.6	20	1	ABZ88558	Human oligonucleot
	128	14.2	3.6	20	1	ACC47947	Fusion mGM-CSF/mIL
	129	14	3.5	17	1	ACC51502	Human tumour suppr
	130	14	3.5	18	1	ADC22272	Protein binding do
c	131	14	3.5	20	1	AAT80030	Alpha1 integrin pr
	132	14	3.5	20	1	ADA06103	Human fatty acid-C
	133	13.8	3.5	17	1	AAT53433	Rat ICAM hammerhea
	134	13.8	3.5	17	1	AAT53447	Rat ICAM hammerhea
	135	13.8	3.5	17	1	AAT53582	Rat ICAM hammerhea
	136	13.8	3.5	17	1	ABN00919	Human GDMLP-1 17-m
c	137	13.8	3.5	17	1	ABS75093	Human PAPP-Ea asso
c	138	13.8	3.5	17	1	ABS75092	Human PAPP-Ea asso
c	139	13.8	3.5	17	1	ABT36083	Tumour suppression
	140	13.8	3.5	17	1	ABZ65528	Human HER2 DNAzyme
	141	13.8	3.5	17	1	ACD53393	HBV G-cleaver subs
	142	13.8	3.5	17	1	ACD51703	HBV inozyme substr
	143	13.8	3.5	18	1	ABK98126	Triple helix formi
	144	13.8	3.5	19	1	AAD12911	PCR primer PA3 use
c	145	13.4	3.4	15	1	AAF51148	IGF-I oligonucleot
c	146	13.4	3.4	15	1	AAF51147	IGF-I oligonucleot
c	147	13.4	3.4	15	1	ABX15036	Human lactoferrin
	148	13.4	3.4	17	1	AAV99300	RSPaV antisense st
c	149	13.4	3.4	17	1	AAA36427	Human genomic SNP
c	150	13.4	3.4	17	1	AAH95808	Human Chk1 ribozym
c	151	13.4	3.4	17	1	ABA77941	BRCA1 mutation cor
	152	13.4	3.4	17	1	ABA77942	BRCA1 mutation cor
c	153	13.4	3.4	17	1	ABN02147	Human GDMLP-1 17-m
c	154	13.4	3.4	17	1	ABN02146	Human GDMLP-1 17-m
c	155	13.4	3.4	17	1	ABN02145	Human GDMLP-1 17-m
	156	13.4	3.4	17	1	ABV90405	Human POSHL1 scann
	157	13.4	3.4	17	1	ABV90401	Human POSHL1 scann
	158	13.4	3.4	17	1	ABK98192	Triple helix formi
c	159	13.4	3.4	17	1	ABT38175	Tumour suppression
	160	13.4	3.4	17	1	ACC64096	Murine oligonucleo
c	161	13.4	3.4	17	1	ACC66382	Murine oligonucleo
c	162	13.4	3.4	17	1	ADB43783	Tumour suppression
c	163	13.4	3.4	18	1	AAT08673	Primer P53-3X5SEQ
c	164	13.4	3.4	18	1	AAV30210	Caenorhabditis ele
	165	13.4	3.4	18	1	AAA55574	TRAF3 antisense ol
c	166	13.4	3.4	18	1	AAZ74047	Human biallelic ma
	167	13.4	3.4	18	1	AAZ95437	TEIL random bindin
c	168	13.4	3.4	18	1	AAH45383	Corynebacterium th
c	169	13.4	3.4	19	1	ACF39450	Acute lymphoblasti
c	170	13.2	3.3	18	1	AAX71712	Human KDR VEGF rec
c	171	13.2	3.3	18	1	AAZ27756	PCR primer for hum
c	172	13.2	3.3	18	1	AAX52637	Human genome biall
	173	13.2	3.3	18	1	AAA09096	PCR primer specifi
	174	13.2	3.3	18	1	AAZ91393	Human PTEN phospho
	175	13.2	3.3	18	1	AAZ94133	Retroviral vector
c	176	13.2	3.3	18	1	AAZ70837	Human biallelic ma
	177	13.2	3.3	18	1	AAZ70452	Human biallelic ma
c	178	13.2	3.3	18	1	AAZ71009	Human biallelic ma
	179	13.2	3.3	18	1	AAS14019	Human PTEN antisen
	180	13.2	3.3	18	1	AAD40054	Human PTEN antisen
c	181	13.2	3.3	18	1	ABT06147	Human light chain
c	182	13.2	3.3	18	1	ADB54704	Hybridisation olig
	183	13.2	3.3	18	1	ADC49308	Inhibitor of cell
c	184	13.2	3.3	18	1	ADC70279	Primer oligo used
c	185	13	3.3	13	1	ABC02170	Oligonucleotide SE
	186	13	3.3	13	1	ABC02171	Oligonucleotide SE
c	187	13	3.3	14	1	ABZ72890	Rod opsin hairpin
c	188	13	3.3	15	1	AAS95330	Human Histamine H2
c	189	13	3.3	15	1	AAD26056	Human apolipoprote
	190	13	3.3	15	1	AAD43403	Human CYP3A5 gene
	191	13	3.3	15	1	AAL41830	Human GCNT1 allele
c	192	13	3.3	16	1	AAQ48328	MAb 25D2 primer B1
c	193	13	3.3	16	1	AAQ98837	Anti-human IL-4 MA
c	194	13	3.3	16	1	AAX09974	Human biallelic po
c	195	13	3.3	17	1	AAV96653	Potato citrate syn
c	196	13	3.3	17	1	AAV96652	Potato citrate syn
c	197	13	3.3	17	1	ABT34631	Tumour suppression
c	198	13	3.3	17	1	ADB44659	Tumour suppression
	199	13	3.3	18	1	AAZ22406	Antisense oligonuc
c	200	13	3.3	18	1	AAX57206	Cysteine noose lib
	201	13	3.3	18	1	AAF94659	Rho B antisense ph
c	202	13	3.3	18	1	AAH47596	Human Her-3 mRNA i
c	203	12.8	3.2	16	1	AAQ13910	Probe YZ28 to N-ra
c	204	12.8	3.2	16	1	AAQ13904	Probe YZ2 to N-ras
c	205	12.8	3.2	16	1	AAQ29775	5′ amidated probe
c	206	12.8	3.2	17	1	AAQ57220	Enzymatic RNA mole
c	207	12.8	3.2	17	1	AAQ93477	Hammerhead ribozym
c	208	12.8	3.2	17	1	AAX63384	Human stromelysin
c	209	12.8	3.2	17	1	AAT59750	Probe DHOG-57 for
	210	12.8	3.2	17	1	AAV97942	Human EGF-R target
	211	12.8	3.2	17	1	AAV97941	Human EGF-R target
	212	12.8	3.2	17	1	AAA22631	Integrin subunit b
	213	12.8	3.2	17	1	AAA18464	Human TIE-2 substr
	214	12.8	3.2	17	1	AAA25760	Oestrogen receptor
	215	12.8	3.2	17	1	AAA25680	Oestrogen receptor
	216	12.8	3.2	17	1	AAC72321	Single nucleotide
	217	12.8	3.2	17	1	AAC72312	Single nucleotide
	218	12.8	3.2	17	1	AAC72297	Single nucleotide
c	219	12.8	3.2	17	1	AAF01879	Hammerhead ribozym
c	220	12.8	3.2	17	1	AAH95403	Human Chk1 ribozym
c	221	12.8	3.2	17	1	ABK03560	Human CD20 DNAzyme
c	222	12.8	3.2	17	1	ABK03697	Human CD20 Amberzy
c	223	12.8	3.2	17	1	ABK02513	Human NOGO Amberzy
c	224	12.8	3.2	17	1	ABK03329	Human CD20 Inozyme
c	225	12.8	3.2	17	1	ABK03696	Human CD20 Amberzy
	226	12.8	3.2	17	1	AAH47420	XPD gene exon 23 a
	227	12.8	3.2	17	1	ABL92157	Long human Tumour
	228	12.8	3.2	17	1	ABN00235	Human GDMLP-1 17-m
	229	12.8	3.2	17	1	ABN00920	Human GDMLP-1 17-m
	230	12.8	3.2	17	1	ABN09221	Human GDMLP-1 17-m
	231	12.8	3.2	17	1	ABN00947	Human GDMLP-1 17-m
	232	12.8	3.2	17	1	ABN00946	Human GDMLP-1 17-m
	233	12.8	3.2	17	1	ABN00236	Human GDMLP-1 17-m
	234	12.8	3.2	17	1	ABN06104	Human GDMLP-1 17-m
	235	12.8	3.2	17	1	ABN06105	Human GDMLP-1 17-m
	236	12.8	3.2	17	1	ABN09222	Human GDMLP-1 17-m
	237	12.8	3.2	17	1	ABN00918	Human GDMLP-1 17-m
	238	12.8	3.2	17	1	ABK19224	Human ERG Amberzym
	239	12.8	3.2	17	1	ABK18752	Human ERG DNAzyme
	240	12.8	3.2	17	1	ABK19169	Human ERG Amberzym
c	241	12.8	3.2	17	1	ABS75089	Human PAPP-Ea asso
c	242	12.8	3.2	17	1	ABS75091	Human PAPP-Ea asso
c	243	12.8	3.2	17	1	ABS75090	Human PAPP-Ea asso
c	244	12.8	3.2	17	1	ABS75094	Human PAPP-Ea asso
	245	12.8	3.2	17	1	ABV90003	Human POSHL1 scann
	246	12.8	3.2	17	1	ABV90065	Human POSHL1 scann
	247	12.8	3.2	17	1	ABV90064	Human POSHL1 scann
	248	12.8	3.2	17	1	ABV90002	Human POSHL1 scann
	249	12.8	3.2	17	1	AAD36054	Human cMLCK DNA am
	250	12.8	3.2	17	1	ABX72082	Human tumour endot
	251	12.8	3.2	17	1	ABT35485	Tumour suppression
c	252	12.8	3.2	17	1	ACD65498	HCV minus strand D

c 253	12.8	3.2	17	1	ACD59037	HCV DNAzyme substr
254	12.8	3.2	17	1	ADB42565	Tumour suppression
255	12.8	3.2	17	1	ADE87480	Fowlpox virus Orf1
c 256	12.8	3.2	18	1	AAT79132	Primer for human s
c 257	12.8	3.2	18	1	AAV09937	Nucleotide sequenc
c 258	12.8	3.2	18	1	AAX10086	Human biallelic po
259	12.8	3.2	18	1	AAX84266	PCR primer for hum
c 260	12.8	3.2	18	1	AAX76860	PCR primer for clo
261	12.8	3.2	18	1	AAZ11782	Oligonucleotide pr
c 262	12.8	3.2	18	1	AAA52848	Human CD44 antisen
c 263	12.8	3.2	18	1	AAA52819	Human CD44 antisen
c 264	12.8	3.2	18	1	AAZ57722	Human G-alpha-12 a
c 265	12.8	3.2	18	1	AAZ59776	Human Smad4 phosph
266	12.8	3.2	18	1	AAZ55947	Xenopus laevis ker
267	12.8	3.2	18	1	AAA15529	Human G-alpha-i3 a
c 268	12.8	3.2	18	1	AAS95059	Human otoferlin ex
c 269	12.8	3.2	18	1	ABS60851	Human genotyping P
c 270	12.8	3.2	18	1	ABK93994	Endothelin-2 (EDN-
c 271	12.8	3.2	18	1	ABV99237	Human CYP7A1 fragm
c 272	12.6	3.2	15	1	AAS95586	Apolipoprotein C-I
273	12.6	3.2	15	1	ABQ72850	Human GRM8 allele-
274	12.6	3.2	18	1	AAH37874	SNP specific lower
275	12.4	3.1	14	1	AAA23370	Integrin subunit b
c 276	12.4	3.1	15	1	AAT56370	Mouse TNF-a hammer
277	12.4	3.1	15	1	AAV57031	Human Notch3 gene
278	12.4	3.1	15	1	AAX33145	Peptide nucleic ac
279	12.4	3.1	15	1	AAS02967	Human CHMR1 allele
c 280	12.4	3.1	15	1	AAH42731	A promoter element
281	12.4	3.1	15	1	AAF49933	IGF-I oligonucleot
c 282	12.4	3.1	15	1	AAF51146	IGF-I oligonucleot
283	12.4	3.1	15	1	AAF49932	IGF-I oligonucleot
c 284	12.4	3.1	15	1	AAF51149	IGF-I oligonucleot
285	12.4	3.1	15	1	AAF79917	Nucleotide sequenc
286	12.4	3.1	15	1	AAD24265	Egl linked triplex
c 287	12.4	3.1	15	1	AAD24075	Rice tungro bacill
288	12.4	3.1	16	1	AAX10154	Human biallelic po
c 289	12.4	3.1	17	1	AAA18464	Human TIE-2 substr
c 290	12.4	3.1	17	1	AAQ32223	Cloning tail 3'(3Y
c 291	12.4	3.1	17	1	AAQ54724	Human and rat NT-4
c 292	12.4	3.1	17	1	AAT53528	Rat ICAM hammerhea
c 293	12.4	3.1	17	1	AAT53691	Rat ICAM hammerhea
c 294	12.4	3.1	17	1	AAT53446	Rat ICAM hammerhea
c 295	12.4	3.1	17	1	AAV37795	Interleukin-15 gen
296	12.4	3.1	17	1	AAV37791	Interleukin-15 gen
c 297	12.4	3.1	17	1	AAV60475	Thrombin-binding a
298	12.4	3.1	17	1	AAA22642	Integrin subunit b
299	12.4	3.1	17	1	AAA22643	Integrin subunit b
c 300	12.4	3.1	17	1	AAA17534	Aryl hydrocarbon n
c 301	12.4	3.1	17	1	AAV91267	Human C-raf target
c 302	12.4	3.1	17	1	AAV91268	Human C-raf target
c 303	12.4	3.1	17	1	AAA35998	Human genomic SNP
304	12.4	3.1	17	1	AAA25681	Oestrogen receptor
305	12.4	3.1	17	1	AAA25682	Oestrogen receptor
c 306	12.4	3.1	17	1	AAA89019	Plasmodium falcipa
c 307	12.4	3.1	17	1	AAH95807	Human Chk1 ribozym
c 308	12.4	3.1	17	1	ABK03137	Human CD20 Inozyme
c 309	12.4	3.1	17	1	ABK03695	Human CD20 Amberzy
c 310	12.4	3.1	17	1	ABN02144	Human GDMLP-1 17-m
c 311	12.4	3.1	17	1	ABN02148	Human GDMLP-1 17-m
312	12.4	3.1	17	1	ABK25404	Male-sterile plant
c 313	12.4	3.1	17	1	ABK25403	Male-sterile plant
314	12.4	3.1	17	1	ABV90400	Human POSHL1 scann
315	12.4	3.1	17	1	ABV90406	Human POSHL1 scann
c 316	12.4	3.1	17	1	ABL31647	Human HLA genotypi
c 317	12.4	3.1	17	1	ACC53588	Human tumour suppr
318	12.4	3.1	17	1	ACC49388	Human 5HTT polymor
c 319	12.4	3.1	17	1	ABT37418	Tumour suppression
c 320	12.4	3.1	17	1	ACA07861	NFKB sub-unit modu
c 321	12.4	3.1	17	1	ACA06818	NFKB sub-unit modu
c 322	12.4	3.1	17	1	ACA07860	NFKB sub-unit modu
323	12.4	3.1	17	1	ABZ62161	Human H-Ras DNAzym
324	12.4	3.1	17	1	ACC63071	Murine oligonucleo
c 325	12.4	3.1	17	1	ACC66201	Murine oligonucleo
326	12.4	3.1	17	1	ADB45500	Tumour suppression
c 327	12.4	3.1	17	1	ADB44845	Tumour suppression
328	12.2	3.1	17	1	AAT53568	Rat ICAM hammerhea
329	12.2	3.1	17	1	AAT53658	Rat ICAM hammerhea
330	12.2	3.1	17	1	AAT53743	Rat ICAM hammerhea
c 331	12.2	3.1	17	1	AAX69323	Human flt1 VEGF re
c 332	12.2	3.1	17	1	AAX74837	Mouse flt-1 VEGF r
c 333	12.2	3.1	17	1	AAX74836	Mouse flt-1 VEGF r
334	12.2	3.1	17	1	AAX69799	Human flt1 VEGF re
c 335	12.2	3.1	17	1	AAX71120	Human KDR VEGF rec
336	12.2	3.1	17	1	AAX72736	Mouse flk-1 VEGF r
c 337	12.2	3.1	17	1	AAX72657	Mouse flk-1 VEGF r
338	12.2	3.1	17	1	AAV10758	Human breast cance
339	12.2	3.1	17	1	AAT88304	Oligonucleotide pr
c 340	12.2	3.1	17	1	AAX62192	Granule bound star
341	12.2	3.1	17	1	AAV62212	Probe for BRCA1 (o
342	12.2	3.1	17	1	AAV94630	Human IL-2 recepto
343	12.2	3.1	17	1	AAA22512	Integrin subunit b
344	12.2	3.1	17	1	AAX34382	Wild type BRCA1 ex
c 345	12.2	3.1	17	1	AAA25560	Oestrogen receptor
c 346	12.2	3.1	17	1	AAF04292	Hammerhead ribozym
c 347	12.2	3.1	17	1	AAF04740	Hammerhead ribozym
348	12.2	3.1	17	1	AAF05409	Hammerhead ribozym
349	12.2	3.1	17	1	AAI65850	Nucleotide sequenc
c 350	12.2	3.1	17	1	AAH95805	Human Chk1 ribozym
c 351	12.2	3.1	17	1	ABK03533	Human CD20 Zinzyme
c 352	12.2	3.1	17	1	ABK00237	Human NOGO Hammerh
c 353	12.2	3.1	17	1	ABK03330	Human CD20 Inozyme
c 354	12.2	3.1	17	1	ABN07400	Human GDMLP-1 17-m
c 355	12.2	3.1	17	1	ABN08862	Human GDMLP-1 17-m
356	12.2	3.1	17	1	ABN00237	Human GDMLP-1 17-m
357	12.2	3.1	17	1	ABN00948	Human GDMLP-1 17-m
c 358	12.2	3.1	17	1	ABN06057	Human GDMLP-1 17-m
c 359	12.2	3.1	17	1	ABN07672	Human GDMLP-1 17-m
360	12.2	3.1	17	1	ABN08912	Human GDMLP-1 17-m
361	12.2	3.1	17	1	ABN08917	Human GDMLP-1 17-m
362	12.2	3.1	17	1	ABN08916	Human GDMLP-1 17-m
c 363	12.2	3.1	17	1	ABN00669	Human GDMLP-1 17-m
364	12.2	3.1	17	1	ABN09571	Human GDMLP-1 17-m
c 365	12.2	3.1	17	1	ABN07398	Human GDMLP-1 17-m
c 366	12.2	3.1	17	1	ABN06056	Human GDMLP-1 17-m
c 367	12.2	3.1	17	1	ABN07401	Human GDMLP-1 17-m
368	12.2	3.1	17	1	ABN06109	Human GDMLP-1 17-m
369	12.2	3.1	17	1	ABN09223	Human GDMLP-1 17-m
c 370	12.2	3.1	17	1	ABN07399	Human GDMLP-1 17-m
371	12.2	3.1	17	1	ABN08909	Human GDMLP-1 17-m
c 372	12.2	3.1	17	1	ABN00670	Human GDMLP-1 17-m
c 373	12.2	3.1	17	1	ABN00557	Human GDMLP-1 17-m
374	12.2	3.1	17	1	ABN00234	Human GDMLP-1 17-m
375	12.2	3.1	17	1	ABN05888	Human GDMLP-1 17-m
c 376	12.2	3.1	17	1	ABN07673	Human GDMLP-1 17-m
c 377	12.2	3.1	17	1	ABN07674	Human GDMLP-1 17-m
c 378	12.2	3.1	17	1	ABQ63784	Human KTOM1a porti
379	12.2	3.1	17	1	ABQ63333	Human KTOM1a porti
c 380	12.2	3.1	17	1	ABQ63752	Human KTOM1a porti
c 381	12.2	3.1	17	1	ABV79209	Human HTPL scannin
c 382	12.2	3.1	17	1	ABS98234	Human lactoferrin
c 383	12.2	3.1	17	1	ABL01751	Human MSH2 (hMSH2)
c 384	12.2	3.1	17	1	AAS99479	Tuberculosis bacte
c 385	12.2	3.1	17	1	ABK19044	Human ERG DNAzyme
c 386	12.2	3.1	17	1	ABK18572	Human ERG G-cleave
387	12.2	3.1	17	1	ABS74900	Human PAPP-Ea asso
388	12.2	3.1	17	1	ABS74901	Human PAPP-Ea asso
c 389	12.2	3.1	17	1	ABV91212	Human POSHL1 scann
390	12.2	3.1	17	1	ABV90001	Human POSHL1 scann
391	12.2	3.1	17	1	ABV90004	Human POSHL1 scann
c 392	12.2	3.1	17	1	ABV90314	Human POSHL1 scann
393	12.2	3.1	17	1	ABV90399	Human POSHL1 scann
394	12.2	3.1	17	1	ABV90658	Human POSHL1 scann
395	12.2	3.1	17	1	ABV91175	Human POSHL1 scann
c 396	12.2	3.1	17	1	ABV89332	Human POSHL1 scann
397	12.2	3.1	17	1	ABV91174	Human POSHL1 scann
398	12.2	3.1	17	1	ABL31366	Human HLA genotypi

	399	12.2	3.1	17	1	ABL31114	Human HLA genotypi
	400	12.2	3.1	17	1	ABK56127	Human CLCA1 gene e
	401	12.2	3.1	17	1	ACC52342	Human tumour suppr
	402	12.2	3.1	17	1	ACC54258	Human tumour suppr
	403	12.2	3.1	17	1	ACC52942	Human tumour suppr
c	404	12.2	3.1	17	1	ACA08293	Necrosis factor ka
	405	12.2	3.1	17	1	ACA06441	NFKB sub-unit modu
c	406	12.2	3.1	17	1	ADA99514	Human MDZ3 scannin
	407	12.2	3.1	17	1	ABZ65360	Human HER2 DNAzyme
	408	12.2	3.1	17	1	ABZ65331	Human HER2 DNAzyme
	409	12.2	3.1	17	1	ABZ65386	Human HER2 DNAzyme
	410	12.2	3.1	17	1	ABZ65348	Human HER2 DNAzyme
c	411	12.2	3.1	17	1	ABZ64958	Human HER2 DNAzyme
c	412	12.2	3.1	17	1	ACD50454	HBV hammerhead rib
c	413	12.2	3.1	17	1	ACD55354	HBV amberzyme subs
c	414	12.2	3.1	17	1	ACD60052	HCV DNAzyme substr
c	415	12.2	3.1	17	1	ACD55345	HBV amberzyme subs
	416	12.2	3.1	17	1	ACD63384	HCV minus strand D
	417	12.2	3.1	17	1	ACD50352	HBV hammerhead rib
	418	12.2	3.1	17	1	ACD62971	HCV minus strand D
	419	12.2	3.1	17	1	ACD63400	HCV minus strand D
	420	12.2	3.1	17	1	ACC66568	Murine oligonucleo
	421	12.2	3.1	17	1	ADA61967	Human breast cance
c	422	12.2	3.1	17	1	ADB40353	Tumour suppression
	423	12.2	3.1	17	1	ADB42331	Tumour suppression
c	424	12.2	3.1	17	1	ADB42483	Tumour suppression
	425	12.2	3.1	17	1	ADB42715	Tumour suppression
	426	12.2	3.1	17	1	ADB42752	Tumour suppression
	427	12.2	3.1	17	1	ADC37896	Human AMLP1a scann
	428	12.2	3.1	17	1	ADC37895	Human AMLP1a scann
	429	12.2	3.1	17	1	ADB45590	Tumour suppression
	430	12.2	3.1	17	1	ADB45807	Tumour suppression
	431	12.2	3.1	17	1	ADB45738	Tumour suppression
	432	12.2	3.1	17	1	ADD49164	Human NOV protein-
	433	12.2	3.1	17	1	ADE30977	Cholesterol homeos
	434	12	3.0	12	1	AAQ20115	Cross-linking olig
	435	12	3.0	12	1	AAQ30265	Oligomer HBV112 fo
c	436	12	3.0	12	1	AAT35028	Triplex-forming ol
	437	12	3.0	12	1	AAX14761	Triple helix third
c	438	12	3.0	12	1	ABI25638	Oligonucleotide pr
c	439	12	3.0	13	1	AAX14884	Triple helix formi
	440	12	3.0	13	1	ABF19497	Oligonucleotide SE
c	441	12	3.0	13	1	ABF19496	Oligonucleotide SE
	442	12	3.0	15	1	AAX75731	Human flt-1 and KD
	443	12	3.0	15	1	AAZ64218	Substrate for hamm
c	444	12	3.0	15	1	ABS51918	Human FMO2 gene po
	445	12	3.0	15	1	ABK36997	Human ALAS2 gene a
c	446	12	3.0	15	1	ABK68725	Human OR11A1 gene
c	447	12	3.0	15	1	ABK16655	Human AGTRL1 gene
c	448	12	3.0	15	1	ABK96512	Human PLAU gene, a
c	449	12	3.0	15	1	AAD25004	Human AANAT gene p
	450	12	3.0	15	1	ABX01271	Hepatitis C virus
c	451	12	3.0	16	1	ADC98469	NOT304 polymorphis
c	452	12	3.0	17	1	AAX63823	Rabbit stromelysin
	453	12	3.0	17	1	AAX71614	Human KDR VEGF rec
	454	12	3.0	17	1	AAX71615	Human KDR VEGF rec
c	455	12	3.0	17	1	AAH95806	Human Chk1 ribozym
	456	12	3.0	17	1	ABA78038	BRCA1 mutation cor
c	457	12	3.0	17	1	ABA78037	BRCA1 mutation cor
c	458	12	3.0	17	1	AAF56550	HIV-1 detection pr
c	459	12	3.0	17	1	ABN02149	Human GDMLP-1 17-m
c	460	12	3.0	17	1	ABN02150	Human GDMLP-1 17-m
	461	12	3.0	17	1	ABT35050	Tumour suppression
	462	12	3.0	17	1	ABT34660	Tumour suppression
	463	12	3.0	17	1	ABT37809	Tumour suppression
c	464	12	3.0	17	1	ACA06712	NFKB sub-unit modu
c	465	12	3.0	17	1	ACA06713	NFKB sub-unit modu
	466	12	3.0	17	1	ABZ64774	Human HER2 DNAzyme
	467	12	3.0	17	1	ABZ64775	Human HER2 DNAzyme
	468	12	3.0	17	1	ACD59279	HCV DNAzyme substr
c	469	12	3.0	17	1	ACD63390	HCV minus strand D
	470	12	3.0	17	1	ACC66522	Murine oligonucleo
	471	12	3.0	17	1	ACC68611	Murine oligonucleo
c	472	12	3.0	17	1	ACC49069	Human NOV2 CG14076
c	473	11.8	3.0	15	1	AAQ22447	Probe (7) for DNA
	474	11.8	3.0	15	1	AAT52193	Mouse ICAM hammerh
c	475	11.8	3.0	15	1	AAT56282	Mouse TNF-a hammer
	476	11.8	3.0	15	1	AAT54975	Mouse relA hammerh
	477	11.8	3.0	15	1	AAT52196	Mouse ICAM hammerh
	478	11.8	3.0	15	1	AAT52191	Mouse ICAM hammerh
	479	11.8	3.0	15	1	AAT55164	Human relA hammerh
	480	11.8	3.0	15	1	AAT50341	Rabbit CETP HH rib
	481	11.8	3.0	15	1	AAV58335	Probe for Human Se
	482	11.8	3.0	15	1	AAV48734	ErbB-2 gene antise
c	483	11.8	3.0	15	1	AAZ64437	Substrate for hamm
	484	11.8	3.0	15	1	AAZ62793	Substrate for HH r
c	485	11.8	3.0	15	1	AAH18948	UCP3 polymorphism
c	486	11.8	3.0	15	1	AAD05856	Human cholinergic
	487	11.8	3.0	15	1	AAF49935	IGF-I oligonucleot
c	488	11.8	3.0	15	1	AAF47907	IGFBP3 oligonucleo
	489	11.8	3.0	15	1	AAF52792	IGF-I oligonucleot
	490	11.8	3.0	15	1	AAF49934	IGF-I oligonucleot
	491	11.8	3.0	15	1	AAF47290	IGFBP3 oligonucleo
c	492	11.8	3.0	15	1	AAF47905	IGFBP3 oligonucleo
	493	11.8	3.0	15	1	AAF48903	IGFBP3 oligonucleo
	494	11.8	3.0	15	1	AAF47379	IGFBP3 oligonucleo
c	495	11.8	3.0	15	1	AAF48554	IGFBP3 oligonucleo
c	496	11.8	3.0	15	1	AAF47908	IGFBP3 oligonucleo
	497	11.8	3.0	15	1	AAF48907	IGFBP3 oligonucleo
	498	11.8	3.0	15	1	AAF48902	IGFBP3 oligonucleo
	499	11.8	3.0	15	1	AAF47289	IGFBP3 oligonucleo
c	500	11.8	3.0	15	1	AAF47496	IGFBP3 oligonucleo
c	501	11.8	3.0	15	1	AAF48553	IGFBP3 oligonucleo
c	502	11.8	3.0	15	1	AAF48618	IGFBP3 oligonucleo
	503	11.8	3.0	15	1	AAF70083	Human TNFRSF11B ge
	504	11.8	3.0	15	1	ABA97405	Nucleotide sequenc
	505	11.8	3.0	15	1	ABQ96112	Tumour suppression
c	506	11.8	3.0	15	1	ABK14045	ASO probe #6, used
c	507	11.8	3.0	15	1	ABX01490	Hepatitis C virus
	508	11.8	3.0	15	1	ABX00644	Hepatitis C virus
c	509	11.8	3.0	15	1	AAL48091	Human neuropeptide
c	510	11.8	3.0	15	1	AAL48090	Human neuropeptide
	511	11.8	3.0	15	1	ABK98166	Triple helix formi
	512	11.8	3.0	15	1	ABK98185	Triple helix formi
	513	11.8	3.0	15	1	ACD56198	HBV enzymatic nucl
	514	11.8	3.0	15	1	ADB68522	Single-base mismat
c	515	11.8	3.0	15	1	ADD71431	Stimulus-responsiv
c	516	11.8	3.0	15	1	ADE14002	Optineurin promote
c	517	11.8	3.0	15	1	ADE52728	Oligonucleotide SE
	518	11.8	3.0	16	1	AAT02859	Fungus-derived 18S
	519	11.8	3.0	16	1	AAV45768	Capture probe 14.
	520	11.8	3.0	16	1	AAX02894	Human mACHR-6 cDNA
	521	11.8	3.0	16	1	AAX59175	Human flh84g5 3' u
	522	11.8	3.0	16	1	AAH44581	Rat mACHR-6 antise
	523	11.8	3.0	16	1	AAA67030	Human leukocyte an
c	524	11.8	3.0	16	1	AAC63247	Oligonucleotide #2
c	525	11.8	3.0	16	1	AAF57677	Rat sodium channel
c	526	11.8	3.0	16	1	AAS56938	Validation ribozym
c	527	11.8	3.0	16	1	AAF30671	Sodium channel bet
c	528	11.8	3.0	16	1	ACF63301	Human histamine re
c	529	11.8	3.0	16	1	ABT33693	Ribozyme substrate
	530	11.8	3.0	16	1	ABX11859	Human muscarinic a
	531	11.8	3.0	16	1	ACD82376	Nucleic acid cloni
	532	11.8	3.0	16	1	ADC22143	Group II intron de
	533	11.6	2.9	15	1	AAI67333	Human FKBP8 allele
c	534	11.6	2.9	15	1	ABS64891	ASO primer, #8, fo
	535	11.6	2.9	15	1	AAL39576	SSTR4 gene polymor
	536	11.6	2.9	15	1	ABL39417	Human ETFB allele-
c	537	11.6	2.9	15	1	ABK72358	Human HTR5A gene a

ALIGNMENTS

RESULT 1
AAL50618/c

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ID   AAL50618 standard; DNA; 38 BP.
XX
AC   AAL50618;
XX
DT   19-DEC-2002  (first entry)
XX
DE   Lipoprotein denaturation inhibiting agent-related PCR primer #2.
XX
KW   Phospholipase inhibitor; PCR; primer; ss; type V sPLA2 inhibitor;
KW   lipoprotein denaturation inhibition; type X sPLA2 inhibitor;
KW   arteriosclerosis; ischaemic disease.
XX
OS   Unidentified.
XX
PN   WO200274342-A1.
XX
PD   26-SEP-2002.
XX
PF   19-MAR-2002; 2002WO-JP002585.
XX
PR   19-MAR-2001; 2001JP-00078569.
PR   28-DEC-2001; 2001JP-00401289.
XX
PA   (SHIO ) SHIONOGI & CO LTD.
XX
PI   Saiga A,  Ono T,  Yamada K,  Hanasaki K;
XX
DR   WPI; 2002-750521/81.
XX
PT   Agents for inhibiting lipoprotein denaturation and treating
PT   arteriosclerosis and ischemic diseases comprise a type V or type X sPLA2
PT   inhibitor.
XX
PS   Example 10; Page 39; 83pp; Japanese.
XX
CC   The invention comprises agents for inhibiting lipoprotein denaturation in
CC   blood and for treating and preventing arteriosclerosis, the agents of the
CC   invention contain a type V and/or type X sPLA2 inhibitor. The lipoprotein
CC   denaturation inhibiting agents of the invention are useful for treating
CC   and preventing arteriosclerosis or ischaemic diseases. The present DNA
CC   sequence represents a PCR primer that was used in an example of the
CC   invention
XX
SQ   Sequence 38 BP; 8 A; 9 C; 15 G; 6 T; 0 U; 0 Other;

  Query Match             8.3%;  Score 33.2;  DB 1;  Length 38;
  Best Local Similarity   92.1%;  Pred. No. 0.16;
  Matches   35;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        526 TTTCCCAACATCCTCTGCTCCTAGGCCTCCCCAGCGAG 563
              ||||||||||||||||||||||||||  || |||||||
Db         38 TTTCCCAACATCCTCTGCTCCTAGGCGGCCGCAGCGAG 1


RESULT 2
AAQ81143/c
ID   AAQ81143 standard; cDNA; 22 BP.
XX
AC   AAQ81143;
XX
DT   25-MAR-2003  (revised)
DT   15-AUG-1995  (first entry)
XX
DE   HPLA2-10 gene PCR primer H10-C.
XX
KW   HPLA2-10; phospholipase A2; PLA2; Batten disease;
KW   neuronal ceroid lipfuscinosis; gene therapy; primer; PCR;
KW   polymerase chain reaction; RACE; ss.
XX
OS   Synthetic.
XX
PN   WO9502328-A1.
XX
PD   26-JAN-1995.
XX
PF   15-JUL-1994;   94WO-US007926.
XX
PR   15-JUL-1993;   93US-00091941.
PR   26-JUL-1993;   93US-00097354.
XX
PA   (INDV ) UNIV INDIANA FOUND.
PA   (INCY-) INCYTE PHARM INC.
XX
PI   Tischfield JA,  Seilhamer JJ;
XX
DR   WPI; 1995-067096/09.
XX
PT   Novel type III and IV low mol. wt. phospholipase A2 enzymes - from humans
PT   and rats, also nucleic acid sequences useful, e.g. for recombinant prodn.
PT   of enzymes, research into Batten's disease, etc.
XX
PS   Example I; Page 43; 160pp; English.
XX
CC   A human PLA2-encoding cDNA (AAQ81138) expressing a novel type IV PLA2,
CC   HPLA2-10, was isolated from human brain RNA by RACE-PCR using the primers
CC   given in AAQ81140-47. Primer H10-C was used for 5' RACE-RT PCR. (Updated
CC   on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 22 BP; 7 A; 1 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             5.5%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 7.1;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        522 ATACTTTCCCAACATCCTCTGC 543
              ||||||||||||||||||||||
Db         22 ATACTTTCCCAACATCCTCTGC 1


RESULT 3
ABL43299
ID   ABL43299 standard; DNA; 20 BP.
XX
AC   ABL43299;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:343.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 11; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
```

```
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention
XX
SQ   Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        869 GGAACACTTTCCTGAGATGC 888
              ||||||||||||||||||||
Db          1 GGAACACTTTCCTGAGATGC 20


RESULT 4
ACC82862/c
ID   ACC82862 standard; DNA; 20 BP.
XX
AC   ACC82862;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128034.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        865 AGTTGGAACACTTTCCTGAG 884
              ||||||||||||||||||||
Db         20 AGTTGGAACACTTTCCTGAG 1


RESULT 5
ACC82842/c
ID   ACC82842 standard; DNA; 20 BP.
XX
AC   ACC82842;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128014.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
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```
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        656 TCAGTCTTTCTCGAAGCTTG 675
              ||||||||||||||||||||
Db         20 TCAGTCTTTCTCGAAGCTTG 1


RESULT 6
ACC82861/c
ID   ACC82861 standard; DNA; 20 BP.
XX
AC   ACC82861;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128033.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        861 CTCCAGTTGGAACACTTTCC 880
              ||||||||||||||||||||
Db         20 CTCCAGTTGGAACACTTTCC 1


RESULT 7
ACC82834/c
ID   ACC82834 standard; DNA; 20 BP.
XX
AC   ACC82834;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128004.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
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```
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 3 A; 1 C; 8 G; 8 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        507 CAACCCACAGTACCAATACT 526
              ||||||||||||||||||||
Db         20 CAACCCACAGTACCAATACT 1


RESULT 8
ACC82841/c
ID   ACC82841 standard; DNA; 20 BP.
XX
AC   ACC82841;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128013.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        641 CCTAAGTCACAGACCTCAGT 660
              ||||||||||||||||||||
Db         20 CCTAAGTCACAGACCTCAGT 1


RESULT 9
ACC82849/c
ID   ACC82849 standard; DNA; 20 BP.
XX
AC   ACC82849;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128021.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
```

```
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match              5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        728 CTGGTCATAGGACTTGGTAG 747
              ||||||||||||||||||||
Db         20 CTGGTCATAGGACTTGGTAG 1


RESULT 10
ACC82866/c
ID   ACC82866 standard; DNA; 20 BP.
XX
AC   ACC82866;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128038.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothicate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match              5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        884 GATGCACTTACTTCTCAGCT 903
              ||||||||||||||||||||
Db         20 GATGCACTTACTTCTCAGCT 1


RESULT 11
ACC82844/c
ID   ACC82844 standard; DNA; 20 BP.
XX
AC   ACC82844;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128018.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
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PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        702 CTCCAGCGAGTCCCAGGAGA 721
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Db         20 CTCCAGCGAGTCCCAGGAGA 1


RESULT 12
ACC82852/c
ID   ACC82852 standard; DNA; 20 BP.
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AC   ACC82852;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128024.
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KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
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XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
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CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        758 TCCCTAGGCCTCCACTTCTG 777
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Db         20 TCCCTAGGCCTCCACTTCTG 1


RESULT 13
ACC82837/c
ID   ACC82837 standard; DNA; 20 BP.
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AC   ACC82837;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128009.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
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FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
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PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 9 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        586 GTTCTGTTTTTCTACAACAC 605
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Db         20 GTTCTGTTTTTCTACAACAC 1


RESULT 14
ACC82865/c
ID   ACC82865 standard; DNA; 20 BP.
XX
AC   ACC82865;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128037.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        880 CTGAGATGCACTTACTTCTC 899
              ||||||||||||||||||||
Db         20 CTGAGATGCACTTACTTCTC 1


RESULT 15
ACC82847/c
ID   ACC82847 standard; DNA; 20 BP.
XX
AC   ACC82847;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128019.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
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FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
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FT                    /note= "2'methoxyethyl nucleotides"
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FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
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PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        703 TCCAGCGAGTCCCAGGAGAG 722
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Db         20 TCCAGCGAGTCCCAGGAGAG 1


RESULT 16
ACC82858/c
ID   ACC82858 standard; DNA; 20 BP.
XX
AC   ACC82858;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128030.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
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XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
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CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        834 TTTTCTTCTCTGAAGACAGC 853
              ||||||||||||||||||||
Db         20 TTTTCTTCTCTGAAGACAGC 1


RESULT 17
ACC82860/c
ID   ACC82860 standard; DNA; 20 BP.
XX
AC   ACC82860;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128032.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
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PN   WO2003038050-A2.
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PD   08-MAY-2003.
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PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
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CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        854 GTCCTGGCTCCAGTTGGAAC 873
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Db         20 GTCCTGGCTCCAGTTGGAAC 1


RESULT 18
ACC82840/c
ID   ACC82840 standard; DNA; 20 BP.
XX
AC   ACC82840;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128012.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
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FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
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FT                    /*tag=  b
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FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
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XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
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PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
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CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        616 CTCTGCCTGGTTCCTGAGAG 635
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Db         20 CTCTGCCTGGTTCCTGAGAG 1


RESULT 19
ACC82848/c
ID   ACC82848 standard; DNA; 20 BP.
XX
AC   ACC82848;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128020.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
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FT                   /note= "2'methoxyethyl nucleotides"
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PN   WO2003038050-A2.
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PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
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PT   gene expression, particularly useful for treating an autoimmune disorder
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XX
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CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        710 AGTCCCAGGAGAGTGACTCT 729
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Db         20 AGTCCCAGGAGAGTGACTCT 1


RESULT 20
ACC82845/c
ID   ACC82845 standard; DNA; 20 BP.
XX
AC   ACC82845;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128017.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
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FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
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CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        694 ACTGTACCCTCCAGCGAGTC 713
              ||||||||||||||||||||
Db         20 ACTGTACCCTCCAGCGAGTC 1


RESULT 21
ACC82855/c
ID   ACC82855 standard; DNA; 20 BP.
XX
AC   ACC82855;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128027.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
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FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        792 GGTGCCAAGAGCTCTCCTCC 811
              ||||||||||||||||||||
Db         20 GGTGCCAAGAGCTCTCCTCC 1


RESULT 22
ACC82857/c
ID   ACC82857 standard; DNA; 20 BP.
XX
AC   ACC82857;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128029.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        808 CTCCAACTCAGGGTTGGCTG 827
              ||||||||||||||||||||
Db         20 CTCCAACTCAGGGTTGGCTG 1


RESULT 23
ACC82846/c
ID   ACC82846 standard; DNA; 20 BP.
XX
AC   ACC82846;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128018.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
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FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        702 CTCCAGCGAGTCCCAGGAGA 721
              ||||||||||||||||||||
Db         20 CTCCAGCGAGTCCCAGGAGA 1


RESULT 24
ACC82851/c
ID   ACC82851 standard; DNA; 20 BP.
XX
AC   ACC82851;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128023.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        753 CAGGGTCCCTAGGCCTCCAC 772
              ||||||||||||||||||||
Db         20 CAGGGTCCCTAGGCCTCCAC 1


RESULT 25
ACC82853/c
ID   ACC82853 standard; DNA; 20 BP.
XX
AC   ACC82853;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128025.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
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FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        763 AGGCCTCCACTTCTGAGGGC 782
              ||||||||||||||||||||
Db         20 AGGCCTCCACTTCTGAGGGC 1


RESULT 26
ACC82864/c
ID   ACC82864 standard; DNA; 20 BP.
XX
AC   ACC82864;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128036.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   mddulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        878 TCCTGAGATGCACTTACTTC 897
              ||||||||||||||||||||
Db         20 TCCTGAGATGCACTTACTTC 1


RESULT 27
ACC82835/c
ID   ACC82835 standard; DNA; 20 BP.
XX
AC   ACC82835;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128005.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
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FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 5 A; 1 C; 8 G; 6 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        511 CCACAGTACCAATACTTTCC 530
              ||||||||||||||||||||
Db         20 CCACAGTACCAATACTTTCC 1


RESULT 28
ACC82839/c
ID   ACC82839 standard; DNA; 20 BP.
XX
AC   ACC82839;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128011.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        600 CAACACAGAGTACTGACTCT 619
              ||||||||||||||||||||
Db         20 CAACACAGAGTACTGACTCT 1


RESULT 29
ACC82843/c
ID   ACC82843 standard; DNA; 20 BP.
XX
AC   ACC82843;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128015.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
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FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        662 TTTCTCGAAGCTTGGCGGAC 681
              ||||||||||||||||||||
Db         20 TTTCTCGAAGCTTGGCGGAC 1


RESULT 30
ACC82859/c
ID   ACC82859 standard; DNA; 20 BP.
XX
AC   ACC82859;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128031.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
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FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        837 TCTTCTCTGAAGACAGCGTC 856
              ||||||||||||||||||||
Db         20 TCTTCTCTGAAGACAGCGTC 1


RESULT 31
ACC82836/c
ID   ACC82836 standard; DNA; 20 BP.
XX
AC   ACC82836;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128008.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
```

```
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        570 CCAGACCAAGACTTTTGTTC 589
              ||||||||||||||||||||
Db         20 CCAGACCAAGACTTTTGTTC 1


RESULT 32
ACC82863/c
ID   ACC82863 standard; DNA; 20 BP.
XX
AC   ACC82863;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128035.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
```

```
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        871 AACACTTTCCTGAGATGCAC 890
              ||||||||||||||||||||
Db         20 AACACTTTCCTGAGATGCAC 1


RESULT 33
ACC82838/c
ID   ACC82838 standard; DNA; 20 BP.
XX
AC   ACC82838;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128010.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
```

```
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        594 TTTCTACAACACAGAGTACT 613
              ||||||||||||||||||||
Db         20 TTTCTACAACACAGAGTACT 1


RESULT 34
ACC82850/c
ID   ACC82850 standard; DNA; 20 BP.
XX
AC   ACC82850;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128022.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        731 GTCATAGGACTTGGTAGGGT 750
              ||||||||||||||||||||
Db         20 GTCATAGGACTTGGTAGGGT 1


RESULT 35
ACC82854/c
ID   ACC82854 standard; DNA; 20 BP.
XX
AC   ACC82854;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128026.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
```

```
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Example 15; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        786 CCCTCTGGTGCCAAGAGCTC 805
              ||||||||||||||||||||
Db         20 CCCTCTGGTGCCAAGAGCTC 1


RESULT 36
ACC82856/c
ID   ACC82856 standard; DNA; 20 BP.
XX
AC   ACC82856;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human PLA2 antisense oligonucleotide, ISIS 128028.
XX
KW   Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
KW   PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
KW   inflammatory disorder; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003038050-A2.
XX
PD   08-MAY-2003.
XX
PF   28-OCT-2002; 2002WO-US034654.
XX
PR   01-NOV-2001; 2001US-00016149.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF, Wyatt JR;
XX
DR   WPI; 2003-430513/40.
XX
PT   New antisense oligonucleotides for modulating phospholipase A2 group V
PT   gene expression, particularly useful for treating an autoimmune disorder
PT   or an inflammatory disorder.
XX
PS   Claim 3; Page 75; 99pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is
CC   also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and
CC   HPLA2-10. The antisense oligonucleotide is useful for treating an animal
CC   having a disease or conditions associated with PLA2 group V, e.g. an
CC   autoimmune disorder or an inflammatory disorder. It is also useful for
CC   modulating PLA2 group V. The antisense compounds are also useful for
CC   diagnostics, therapeutics, prophylaxis, or as research reagents or kits.
CC   The present sequence is an antisense oligonucleotide targetted to human
CC   PLA2 DNA. This sequence is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        804 TCTCCTCCAACTCAGGGTTG 823
              ||||||||||||||||||||
Db         20 TCTCCTCCAACTCAGGGTTG 1


RESULT 37
AAZ29972
ID   AAZ29972 standard; DNA; 24 BP.
XX
AC   AAZ29972;
XX
DT   26-JAN-2000  (first entry)
XX
DE   Primer aga2 used to amplify a fragment of the aga gene.
XX
KW   Essential cellular process; antibiotic; virulence; aga gene; PCR primer;
KW   ss.
```

XX
OS Synthetic.
OS Streptococcus pneumoniae.
XX
PN WO9952926-A1.
XX
PD 21-OCT-1999.
XX
PF 14-APR-1999; 99WO-US008164.
XX
PR 14-APR-1998; 98US-0098563P.
PR 24-APR-1998; 98US-0082952P.
PR 10-JUL-1998; 98US-0100430P.
PR 23-OCT-1998; 98US-0105441P.
PR 23-OCT-1998; 98US-0105447P.
PR 29-JAN-1999; 99US-0117758P.
PR 29-JAN-1999; 99US-0117955P.
XX
PA (VERS-) VERSICOR INC.
XX
PI Trias J, Young D, Rosenow C;
XX
DR WPI; 1999-620370/53.
XX
PT Cells with regulated expression of essential genes, used to, e.g.
PT identify potential therapeutic agents and target genes.
XX
PS Example 14; Page 66; 102pp; English.
XX
CC PCR primers AAZ29971-72 were used to amplify a fragment of the aga gene,
CC in the course of the invention. The specification describes a cell that
CC expresses a gene involved in an essential cellular process (ECP), and in
CC which expression of the gene can be regulated over a range of levels,
CC including a low basal level. The cells are used to identify compounds
CC (potential therapeutic agents) that affect ECP, or potential therapeutic
CC targets, particularly those that impart sensitivity or resistance to
CC particular compounds (antibiotics) or are involved in virulence, or to
CC determine mechanisms of antibiotic sensitivity/resistance or virulence.
CC The cells allow drug targets to be identified even when nothing is known
CC about the target's function or the mechanism of action of the inhibitor.
CC They provide regulated expression of the gene at both higher and lower
CC than normal levels (i.e. cells may be hypersensitive to particular
CC compounds) and allow multiple targets of a single compound to be
CC identified
XX
SQ Sequence 24 BP; 7 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 4.4%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 519 CCAATACTTTCCCAACATCCTCTG 542
|| || || |||||| |||||||||
Db 1 CAAACACATTCCCAGCATCCTCTG 24

RESULT 38
ACI83926
ID ACI83926 standard; DNA; 25 BP.
XX
AC ACI83926;
XX
DT 14-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 83917.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 83917; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.goc/sequence.html
XX
SQ Sequence 25 BP; 4 A; 9 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 4.4%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 49;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 831 CTCTTTTCTTCTCTGAAGACAGCG 854
||||| ||||||| |||||| ||
Db 1 CTCTTCTCTTCTCAGAAGACCTCG 24

RESULT 39
ACI24821
ID ACI24821 standard; DNA; 25 BP.
XX
AC ACI24821;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 24812.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Hqmo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.

XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 24812; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.goc/sequence.html
XX
SQ Sequence 25 BP; 6 A; 8 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 49;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
Qy        829 GTCTCTTTTCTTCTCTGAAGACAG 852
              |||||| ||| || |||||||| |
Db          2 GTCTCTATTCCTCACTGAAGACCG 25
```

RESULT 40
AAT48683
ID AAT48683 standard; DNA; 20 BP.
XX
AC AAT48683;
XX
DT 25-MAR-2003 (revised)
DT 02-OCT-1997 (first entry)
XX
DE Probe for detecting N-ras gene mutations in the codon at position 13.
XX
KW Mutated codon; single base mutation; human; acute myeloid leukaemia;
KW tumour; activated ras gene; N-ras; H-ras; K-ras; ss.
XX
OS Synthetic.
XX
PN US5591582-A.
XX
PD 07-JAN-1997.
XX
PF 23-JUN-1994; 94US-00264425.
XX
PR 23-JUL-1985; 85US-00758104.
PR 04-AUG-1987; 87US-00081490.
PR 21-APR-1992; 92US-00873352.
XX
PA (UYLE-) RIJKSUNIV LEIDEN.
XX
PI Van Der Eb AJ, Bos JL;
XX
DR WPI; 1997-086629/08.
XX
PT Detection of activated ras gene - using oligo:nucleotide probes to detect
PT mutated codon.
XX
PS Claim 24; Col 29; 20pp; English.
XX
CC A new method has been produced for the detection of an activated ras gene
CC containing a mutated codon. The method involves: either cleaving a human
CC subject's genomic DNA with a restriction enzyme to produce DNA fragments
CC and treating the fragments to obtain single-stranded DNA molecules or
CC isolating the subject's polyA+ mRNA; contacting the single-stranded DNA
CC molecules or polyA+ mRNA under hybridising conditions with a labelled
CC synthetic DNA molecule, optionally bound to a solid support, comprising
CC 12-20 nucleotides, where the synthetic DNA molecule is 5'-B-Q-D-3' in the
CC case of single-stranded DNA or is complementary to 5'-B-Q-D-3' in the
CC case of polyA+ mRNA, B = 0-9 nucleotides having a sequence complementary
CC to a sequence in the activated ras gene 5' of the mutated codon, D = 0-12
CC nucleotides having a sequence complementary to a sequence in the
CC activated ras gene 3' of the mutated codon, provided that B and D contain
CC a total of at least 9 nucleotides, and Q is complementary to the mutated
CC codon; treating the resulting hybridised molecules under conditions
CC permitting only fully complementary molecules to remain hybridised; and
CC detecting the presence of the labelled synthetic DNA molecule in the
CC hybridised molecules. The present sequence represents the synthetic DNA
CC probe used for detecting the activated N-ras gene when the mutated codon
CC is at position 13 and has a single base substitution in the first or
CC second nucleotide position so that it encodes an amino acid other than
CC Gly. The preferred mutated codon at position 13 codes for Asn. The method
CC can be used for the diagnosis of acute myeloid leukaemia and other
CC tumours. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 20 BP; 4 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 4.2%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 50;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        527 TTCCCAACATCCTCTGCTCC 546
              |||||||||||  |||||||
Db          1 TTCCCAACATCACCTGCTCC 20
```

RESULT 41
AAT48676
ID AAT48676 standard; DNA; 20 BP.
XX
AC AAT48676;
XX
DT 25-MAR-2003 (revised)
DT 02-OCT-1997 (first entry)
XX
DE Probe for detecting N-ras gene mutations in the codon at position 12.
XX
KW Mutated codon; single base mutation; human; acute myeloid leukaemia;
KW tumour; activated ras gene; N-ras; H-ras; K-ras; ss.
XX
OS Synthetic.
XX
PN US5591582-A.
XX
PD 07-JAN-1997.
XX
PF 23-JUN-1994; 94US-00264425.

```
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Van Der Eb AJ,  Bos JL;
XX
DR   WPI; 1997-086629/08.
XX
PT   Detection of activated ras gene - using oligo:nucleotide probes to detect
PT   mutated codon.
XX
PS   Claim 23; Col 28; 20pp; English.
XX
CC   A new method has been produced for the detection of an activated ras gene
CC   containing a mutated codon. The method involves: either cleaving a human
CC   subject's genomic DNA with a restriction enzyme to produce DNA fragments
CC   and treating the fragments to obtain single-stranded DNA molecules or
CC   isolating the subject's polyA+ mRNA; contacting the single-stranded DNA
CC   molecules or polyA+ mRNA under hybridising conditions with a labelled
CC   synthetic DNA molecule, optionally bound to a solid support, comprising
CC   12-20 nucleotides, where the synthetic DNA molecule is 5'-B-Q-D-3' in the
CC   case of single-stranded DNA or is complementary to 5'-B-Q-D-3' in the
CC   case of polyA+ mRNA, B = 0-9 nucleotides having a sequence complementary
CC   to a sequence in the activated ras gene 5' of the mutated codon, D = 0-12
CC   nucleotides having a sequence complementary to a sequence in the
CC   activated ras gene 3' of the mutated codon, provided that B and D contain
CC   a total of at least 9 nucleotides, and Q is complementary to the mutated
CC   codon; treating the resulting hybridised molecules under conditions
CC   permitting only fully complementary molecules to remain hybridised; and
CC   detecting the presence of the labelled synthetic DNA molecule in the
CC   hybridised molecules. The present sequence represents the synthetic DNA
CC   probe used for detecting the activated N-ras gene when the mutated codon
CC   is at position 12 and has a single base substitution in the first or
CC   second nucleotide position so that it encodes an amino acid other than
CC   Gly. The method can be used for the diagnosis of acute myeloid leukaemia
CC   and other tumours. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 20 BP; 4 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

  Query Match             4.2%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 50;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| | ||||||||
Db          1 TTCCCAACACCATCTGCTCC 20


RESULT 42
AAV73036
ID   AAV73036 standard; DNA; 20 BP.
XX
AC   AAV73036;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene probe #11.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 4-5; 18pp; English.
XX
CC   AAV73026-V73071 are probes used to detect a single-base mutation in a
CC   human ras oncogene. These probes comprise 12-43 nucleotides of formula 5'
CC   -B-Q-D-3', Q = 3 nucleotides complementary to the mutated codon, and B
CC   and D each = 0-20 nucleotides complementary to the ras sequences flanking
CC   the mutated codon. The probes are useful for detecting cancers associated
CC   with point mutations
XX
SQ   Sequence 20 BP; 4 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

  Query Match             4.2%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 50;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| | ||||||||
Db          1 TTCCCAACACCATCTGCTCC 20


RESULT 43
AAV73135/c
ID   AAV73135 standard; DNA; 20 BP.
XX
AC   AAV73135;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene mutant detecting oligomer N-13e.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 19-20; 18pp; English.
XX
CC   AAV73084-V73145 are oligomers used in a method to detect a single-base
CC   mutation in a human ras oncogene. These probes comprise 12-43 nucleotides
CC   of formula 5'-B-Q-D-3', Q = 3 nucleotides complementary to the mutated
CC   codon, and B and D each = 0-20 nucleotides complementary to the ras
CC   sequences flanking the mutated codon. The probes are useful for detecting
```

```
CC   cancers associated with point mutations
XX
SQ   Sequence 20 BP; 5 A; 1 C; 10 G; 4 T; 0 U; 0 Other;

  Query Match             4.2%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 50;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||||| |||||||
Db         20 TTCCCAACATCACCTGCTCC 1


RESULT 44
AAV73031
ID   AAV73031 standard; DNA; 20 BP.
XX
AC   AAV73031;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene probe #6.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Claim 5; Col 4; 18pp; English.
XX
CC   AAV73026-V73071 are probes used to detect a single-base mutation in a
CC   human ras oncogene. These probes comprise 12-43 nucleotides of formula 5'
CC   -B-Q-D-3', Q = 3 nucleotides complementary to the mutated codon, and B
CC   and D each = 0-20 nucleotides complementary to the ras sequences flanking
CC   the mutated codon. The probes are useful for detecting cancers associated
CC   with point mutations
XX
SQ   Sequence 20 BP; 4 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

  Query Match             4.2%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 50;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||||| |||||||
Db          1 TTCCCAACATCACCTGCTCC 20


RESULT 45
AAZ88731
ID   AAZ88731 standard; DNA; 23 BP.
XX
AC   AAZ88731;
XX
DT   15-MAY-2000  (first entry)
XX
DE   Plasmid pBD64 PCR primer #2.
XX
KW   Primer; expression casstte; yeast cell; glucose; glycerol; ethanol;
KW   fatty acid; alkane; ss.
XX
OS   Synthetic.
XX
PN   WO200003008-A2.
XX
PD   20-JAN-2000.
XX
PF   09-JUL-1999;   99WO-DE002174.
XX
PR   10-JUL-1998;   98DE-01030905.
XX
PA   (UYDR ) UNIV DRESDEN TECH.
XX
PI   Juretzek T,  Mauersberger S,  Barth G;
XX
DR   WPI; 2000-171143/15.
XX
PT   Recombinant haploid or diploid Yarrowia lipolytica for functional
PT   heterologous expression of cytochrome P450 systems.
XX
PS   Example 7; Page 17; 46pp; German.
XX
CC.  This invention describes novel recombinant haploid or diploid Yarrowia
CC   lipolytica cells which are characterized in that the cells contain a
CC   plasmid with an expression cassette which consists of a promoter and
CC   terminator which are functionally active in Y. lipolytica and a gene or
CC   cDNA for expression of oligopeptides or proteins that develop properties
CC   which are used for substance transformation. The cells with these
CC   properties under physiological conditions are utilized for developing
CC   glucose, glycerol, ethanol, fatty acids or alkanes, in particular middle
CC   and long chain n-alkanes. The plasmids are useful for the heterologous
CC   expression of proteins in transformed yeast cells. This sequence
CC   represents a PCR primer used in the construction of plasmid pBD64
CC   described in the method of the invention
XX
SQ   Sequence 23 BP; 6 A; 5 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             4.2%;  Score 16.6;  DB 1;  Length 23;
  Best Local Similarity   82.6%;  Pred. No. 65;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy        666 TCGAAGCTTGGCGGACCCCCAGG 688
              | |||||||||  |||||| |||
Db          1 TGGAAGCTTGGGAGACCCCAAGG 23


RESULT 46
ABZ76989
ID   ABZ76989 standard; DNA; 19 BP.
XX
AC   ABZ76989;
XX
DT   07-MAY-2003  (first entry)
XX
DE   Bovine DGAT PCR primer #25.
XX
KW   Acyl CoA:diacylglycerol transferase; DGAT; enzyme; chromosome 14; bovine;
KW   milk; meat marbling; low fat; polymorphic; SNP;
KW   single nucleotide polymorphism; PCR primer; ss.
XX
OS   Bos taurus.
OS   Synthetic.
XX
PN   WO2003004630-A2.
XX
PD   16-JAN-2003.
XX
```

PF 05-JUL-2002; 2002WO-EP007520.
XX
PR 06-JUL-2001; 2001EP-00116412.
PR 13-MAY-2002; 2002US-0379412P.
XX
PA (ARBE-) ARBEITSGEMEINSCHAFT DEUT RINDERZUECHTER.
XX
PI Fries H, Winter A;
XX
DR WPI; 2003-239205/23.
XX
PT New nucleic acid molecule comprising a sequence of an allele of a
PT polymorphic bovine acyl CoA-diacylglycerol transferase gene useful for
PT testing a mammal for its predisposition for fat content of milk and for
PT meat marbling.
XX
PS Example 1; Page 36; 91pp; English.
XX
CC The present invention describes a nucleic acid molecule (NA) (I) encoding
CC a bovine acyl CoA-diacylglycerol transferase (DGAT) contributing to or
CC indicative for low fat content of milk and to low meat marbling
CC (intramuscular fat content). Human DGAT is located to chromosome 8, and
CC bovine DGAT is located to chromosome 14. (I) is useful for testing a
CC mammal for its predisposition for fat content of milk and/or its
CC predisposition for meat marbling. The method comprises analysing the gene
CC encoding DGAT for nucleotide polymorphisms (e.g. single nucleotide
CC polymorphisms (SNPs)) which are connected with the predisposition. The
CC nucleotide polymorphisms are located in the coding region of the DGAT
CC gene and result in substitution, deletion and/or addition of an amino
CC acid sequence of the polypeptide which is encoded by the gene. The
CC nucleic acid molecule has at the position 10433 and 10434 of the DGAT
CC gene a guanine and a cytosine residue, at position 3343 a cytosine or
CC guanine, 11030 a guanine, 11048 a cytosine or thymine and 11093 a
CC thymine, which correlate with a predisposition for low fat content of
CC milk and low meat marbling. The nucleic acid molecule has at the position
CC corresponding to position 10433 and 10434 of the DGAT gene two adenine
CC residues which correlate with a predisposition for high content of milk
CC and high meat marbling. The nucleotide polymorphisms are located in a
CC region which is responsible for the regulation of the expression of the
CC product of the gene encoding DGAT. ABZ76924 to ABZ77045 and ABP96035 to
CC ABP96046 represent sequences used in the exemplification of the present
CC invention
XX
SQ Sequence 19 BP; 3 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 4.1%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 54;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 743 GGTAGGGTCCCAGGGTCC 760
||||||||||||||||| |
Db 1 GGTAGGGTCCCAGGGTAC 18

RESULT 47
ABZ76950
ID ABZ76950 standard; DNA; 19 BP.
XX
AC ABZ76950;
XX
DT 07-MAY-2003 (first entry)
XX
DE Bovine DGAT BAC-DNA sequencing primer #23.
XX
KW Acyl CoA:diacylglycerol transferase; DGAT; enzyme; chromosome 14; bovine;
KW milk; meat marbling; low fat; polymorphic; SNP;
KW single nucleotide polymorphism; PCR primer; ss.
XX
OS Bos taurus.
OS Synthetic.
XX
PN WO2003004630-A2.
XX
PD 16-JAN-2003.
XX
PF 05-JUL-2002; 2002WO-EP007520.
XX
PR 06-JUL-2001; 2001EP-00116412.
PR 13-MAY-2002; 2002US-0379412P.
XX
PA (ARBE-) ARBEITSGEMEINSCHAFT DEUT RINDERZUECHTER.
XX
PI Fries H, Winter A;
XX
DR WPI; 2003-239205/23.
XX
PT New nucleic acid molecule comprising a sequence of an allele of a
PT polymorphic bovine acyl CoA-diacylglycerol transferase gene useful for
PT testing a mammal for its predisposition for fat content of milk and for
PT meat marbling.
XX
PS Example 1; Page 35; 91pp; English.
XX
CC The present invention describes a nucleic acid molecule (NA) (I) encoding
CC a bovine acyl CoA-diacylglycerol transferase (DGAT) contributing to or
CC indicative for low fat content of milk and to low meat marbling
CC (intramuscular fat content). Human DGAT is located to chromosome 8, and
CC bovine DGAT is located to chromosome 14. (I) is useful for testing a
CC mammal for its predisposition for fat content of milk and/or its
CC predisposition for meat marbling. The method comprises analysing the gene
CC encoding DGAT for nucleotide polymorphisms (e.g. single nucleotide
CC polymorphisms (SNPs)) which are connected with the predisposition. The
CC nucleotide polymorphisms are located in the coding region of the DGAT
CC gene and result in substitution, deletion and/or addition of an amino
CC acid sequence of the polypeptide which is encoded by the gene. The
CC nucleic acid molecule has at the position 10433 and 10434 of the DGAT
CC gene a guanine and a cytosine residue, at position 3343 a cytosine or
CC guanine, 11030 a guanine, 11048 a cytosine or thymine and 11093 a
CC thymine, which correlate with a predisposition for low fat content of
CC milk and low meat marbling. The nucleic acid molecule has at the position
CC corresponding to position 10433 and 10434 of the DGAT gene two adenine
CC residues which correlate with a predisposition for high content of milk
CC and high meat marbling. The nucleotide polymorphisms are located in a
CC region which is responsible for the regulation of the expression of the
CC product of the gene encoding DGAT. ABZ76924 to ABZ77045 and ABP96035 to
CC ABP96046 represent sequences used in the exemplification of the present
CC invention
XX
SQ Sequence 19 BP; 3 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 4.1%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 54;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 743 GGTAGGGTCCCAGGGTCC 760
||||||||||||||||| |
Db 1 GGTAGGGTCCCAGGGTAC 18

RESULT 48
AAX32376
ID AAX32376 standard; DNA; 20 BP.
XX
AC AAX32376;
XX
DT 16-JUN-1999 (first entry)
XX
DE Rat endothelin-1 (ET-1) antisense sequence RnET294.
XX
KW Pulmonary hypertension; therapeutic; aerosolised; endothelin-1; ET-1;
KW lung; antisense; ss.
XX
OS Synthetic.
OS Rattus sp.
XX
PN WO9911778-A1.

XX
PD 11-MAR-1999.
XX
PF 02-SEP-1998; 98WO-GB002584.
XX
PR 02-SEP-1997; 97GB-00018487.
XX
PA (UYSH-) UNIV SHEFFIELD.
XX
PI Higenbottam T, Mccormack K, Smith A;
XX
DR WPI; 1999-205185/17.
XX
PT New composition containing an aerosolized antisense ET-1 molecule -
PT useful for treating pulmonary hypertension.
XX
PS Claim 13; Page 22; 37pp; English.
XX
CC The invention relates to a method for treating pulmonary hypertension by
CC delivering a therapeutic composition, comprising an aerosolised antisense
CC endothelin-1 (ET-1) molecule, to the lungs of a patient. The composition
CC can be used in a method for determining the efficacy of the treatment for
CC e.g. when studying molecules and observing the effects of the composition
CC on an animal model system hypersensitive to antisense ET-1. The method is
CC useful for treating pulmonary hypertension. The aerosolised antisense ET-
CC 1 molecule permits inhibition of the ET-1 transcription, which relieves
CC pulmonary hypertension. Its use avoids side effects caused by alternative
CC therapies. Sequences AAX32375-386 represent specifically claimed
CC antisense ET-1 sequences of rat origin
XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 4.1%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 58;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 886 TGCACTTACTTCTCAGCT 903
||||||| |||||||||
Db 1 TGCACTTCCTTCTCAGCT 18

RESULT 49
ABZ90373/c
ID ABZ90373 standard; DNA; 20 BP.
XX
AC ABZ90373;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 5615; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5''and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 14 A; 2 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 4.1%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 58;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 582 TTTTGTTCTGTTTTTCTA 599
||||||| |||||||||
Db 20 TTTTGTTTTGTTTTTCTA 3

RESULT 50
ACF79767/c
ID ACF79767 standard; DNA; 23 BP.
XX
AC ACF79767;
XX
DT 15-JAN-2004 (first entry)
XX
DE Reporter probe REP1 used in methylation assay of p53 gene.
XX
KW Methylation; tumour suppressor; p53 gene; lung cancer; screening; probe;
KW ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 2
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= coumarin-based photocrosslinking moiety"
FT modified_base 22
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= coumarin-based photocrosslinking moiety"
XX
PN WO2003076666-A1.
XX
PD 18-SEP-2003.
XX
PF 10-MAR-2003; 2003WO-US007343.
XX
PR 08-MAR-2002; 2002US-0362772P.

XX
PA (NAXC-) NAXCOR.
XX
PI Peoples R, Van Atta R;
XX
DR WPI; 2003-756833/71.
XX
PT Determining the methylation status of a target nucleic acid sequence, for
PT identifying candidate disease genes, comprises utilizing probe sets
PT complementary to first and second binding domains of the methylation site
PT in the sequence.
XX
PS Example 3; Page 46; 60pp; English.
XX
CC The invention relates to methods for detecting the presence or absence of
CC methylation in a target nucleic acid sequence using probe sets
CC complementary to first and second binding domains located upstream and
CC downstream of one or more methylation sites of interest in a nucleic acid
CC sequence. Methylation determination can be combined with the detection of
CC polymorphisms, including single nucleotide polymorphisms and/or gene
CC dosage determinations, to provide a more complete genetic profile at a
CC locus of interest, and can be used in genotyping and identifying
CC candidate disease genes. The present polyfluoresceinated reporter probe,
CC denoted REP1, was used in a methylation assay of the tumour suppressor
CC p53 gene for use in lung cancer screening. The probe corresponds to
CC nucleotides 1796-1774 of the gene. A 1080 bp sequence from exon 5 through
CC intron 7 of the p53 gene was used as target. This contains 4 HpaII
CC sensitive CpG methylation sites known to be associated with malignant
CC transformation-specific hypomethylation
XX
SQ Sequence 23 BP; 4 A; 6 C; 9 G; 2 T; 0 U; 2 Other;

Query Match 4.1%; Score 16.4; DB 1; Length 23;
Best Local Similarity 94.4%; Pred. No. 70;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 751 CCCAGGGTCCCTAGGCCT 768
||||||||||| ||||||
Db 20 CCCAGGGTCCCCAGGCCT 3

RESULT 51
ABZ93825/c
ID ABZ93825 standard; DNA; 20 BP.
XX
AC ABZ93825;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 9067; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 7 A; 1 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 4.0%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 68;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 521 AATACTTTCCCAACAT 536
||||||||||||||||
Db 17 AATACTTTCCCAACAT 2

RESULT 52
ABK94030/c
ID ABK94030 standard; DNA; 19 BP.
XX
AC ABK94030;
XX
DT 27-AUG-2002 (first entry)
XX
DE Endothelin converting enzyme 1 (ECE-1) PCR primer #4.
XX
KW Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor;
KW EDNR; signaling system; cardiovascular disease; coronary heart disease;
KW hypertension; atherosclerosis; angiogenesis; fatty acid metabolism;
KW diabetes; familial hypercholesterolaemia; forensic marker;
KW transgenic animal; solid support; cardiovascular regulator; PCR; primer;
KW ss.
XX
OS Synthetic.
XX
PN WO200224747-A2.
XX
PD 28-MAR-2002.
XX
PF 31-AUG-2001; 2001WO-EP010087.
XX
PR 19-SEP-2000; 2000EP-00120123.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S;
XX
DR WPI; 2002-435060/46.

XX
PT Novel polynucleotide of the endothelin/endothelin converting
PT enzyme/receptors of endothelin and endothelin converting enzyme signaling
PT system associated with cardiovascular disease, useful for treating the
PT disease.
XX
PS Example 6; Page 52; 190pp; English.
XX
CC The invention describes a polynucleotide (I) of the endothelin
CC (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR)
CC signaling system which is associated with a cardiovascular disease. (I),
CC the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I)
CC or (II) is useful for producing cells capable of expressing a molecular
CC variant polypeptide which is associated with a cardiovascular disease.
CC (II), (III), the EDN, ECE or EDNR polypeptide, or a cell expressing a
CC molecular variant gene comprising (I) is useful for identifying and
CC obtaining a pro-drug or drug capable of modulating the activity of a
CC molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system
CC or its gene product, or for identifying and obtaining an inhibitor of the
CC activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE
CC signaling system or its gene product. The isolated proteins and
CC polynucleotides encoding them are useful for preparation of a
CC pharmaceutical composition for treating a cardiovascular disease such as
CC coronary heart disease, hypertension, atherosclerosis, or related to
CC abnormal angiogenesis or fatty acid metabolism e.g. diabetes and familial
CC hypercholesterolaemia. The gene or a polynucleotide fragment of the
CC EDN/ECE/EDNR signaling system are useful as forensic markers, for
CC creating a transgenic animal and in creation of a solid support
CC comprising polynucleotides, genes, vectors, polypeptides, antibodies or
CC host cells of the invention. This sequence represents a PCR primer used
CC to isolate a cardiovascular regulator polynucleotide from DNA encoding
CC members of the EDN/ECE/EDNR signaling pathway
XX
SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 4.0%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 69;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 621 CCTGGTTCCTGAGAGAGGC 639
|||||||| |||||||||
Db 19 CCTGGTTCTAGAGAGAGGC 1

RESULT 53
AAV73130/c
ID AAV73130 standard; DNA; 20 BP.
XX
AC AAV73130;
XX
DT 09-FEB-1999 (first entry)
XX
DE Human ras oncogene mutant detecting oligomer N-13 p2.
XX
KW Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS Synthetic.
XX
PN US5847095-A.
XX
PD 08-DEC-1998.
XX
PF 03-JAN-1997; 97US-00778543.
XX
PR 23-JUL-1985; 85US-00758104.
PR 04-AUG-1987; 87US-00081490.
PR 21-APR-1992; 92US-00873352.
PR 23-JUN-1994; 94US-00264425.
XX
PA (UYLE-) RIJKSUNIV LEIDEN.
XX
PI Bos JL, Van Der Eb AJ;
XX
DR WPI; 1999-059149/05.
XX
PT Probes for detecting ras oncogene point mutations - useful for the
PT diagnosis of cancer associated with single base mutations.
XX
PS Disclosure; Col 19-20; 18pp; English.
XX
CC AAV73084-V73145 are oligomers used in a method to detect a single-base
CC mutation in a human ras oncogene. These probes comprise 12-43 nucleotides
CC of formula 5'-B-Q-D-3', Q = 3 nucleotides complementary to the mutated
CC codon, and B and D each = 0-20 nucleotides complementary to the ras
CC sequences flanking the mutated codon. The probes are useful for detecting
CC cancers associated with point mutations
XX
SQ Sequence 20 BP; 4 A; 1 C; 10 G; 4 T; 0 U; 1 Other;

Query Match 4.0%; Score 15.8; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 73;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 527 TTCCCAACATCCTCTGCTCC 546
||||||||| | |||||||
Db 20 TTCCCAACANCACCTGCTCC 1

RESULT 54
ADE52676
ID ADE52676 standard; DNA; 20 BP.
XX
AC ADE52676;
XX
DT 29-JAN-2004 (first entry)
XX
DE dnaform38861 PCR primer, SEQ ID 42.
XX
KW DNA-binding protein; interferon-activatable protein; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO2003089466-A1.
XX
PD 30-OCT-2003.
XX
PF 18-APR-2003; 2003WO-JP004981.
XX
PR 19-APR-2002; 2002JP-00117840.
PR 30-APR-2002; 2002JP-00128418.
PR 30-APR-2002; 2002JP-00128779.
PR 04-DEC-2002; 2002JP-00352469.
XX
PA (RIKE) RIKEN KK.
PA (DNAF-) DNAFORM KK.
PA (MITU) MITSUBISHI CHEM CORP.
XX
PI Hayashizaki Y, Kamiya M, Kubodera H;
XX
DR WPI; 2004-011681/01.
XX
PT Proteins with DNA binding activity and substances that affect their
PT activity or expression, useful for treating associated disorders.
XX
PS Example 6; SEQ ID NO 42; 237pp; Japanese.
XX
CC The present invention relates to novel proteins (ADE52648-ADE52660,
CC ADE52670 and ADE52672) and their coding sequences (ADE52635-ADE52647,
CC ADE52669 and ADE52671). The proteins have a DNA-binding activity or an
CC interferon-activatable protein (IAP)-like activity.
XX
SQ Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 4.0%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 73;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        866 GTTGGAACACTTTCCTGAG 884
              ||||||||  |||||||||
Db          2 GTTGGAACCGTTTCCTGAG 20
```

```
RESULT 55
ABZ30698/c
ID   ABZ30698 standard; DNA; 22 BP.
XX
AC   ABZ30698;
XX
DT   30-JAN-2003  (first entry)
XX
DE   Candida albicans GRACE strain PCR primer SEQ ID NO 4849.
XX
KW   Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
KW   signal transduction; DNA replication; cell division; growth;
KW   proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
OS   Candida albicans.
XX
PN   WO200253728-A2.
XX
PD   11-JUL-2002.
XX
PF   26-DEC-2001; 2001WO-US049486.
XX
PR   29-DEC-2000; 2000US-0259128P.
PR   20-FEB-2001; 2001US-00792024.
PR   22-AUG-2001; 2001US-0314050P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Roemer T,  Jiang B,  Boone C,  Bussey H,  Ohlsen KL;
XX
DR   WPI; 2002-566694/60.
XX
PT   Constructing strains for identifying gene products as effective targets
PT   for therapeutic intervention, by inactivating in the strain one allele of
PT   a gene and placing other allele of the gene under conditional expression.
XX
PS   Claim 36; SEQ ID NO 4849; 167pp + Sequence Listing; English.
XX
CC   The invention relates to constructing (M1) a strain of diploid fungal
CC   cells in which both alleles of a gene are modified, comprising modifying
CC   one allele by insertion or replacement by a cassette having an
CC   expressible selectable marker and modifying other allele by
CC   recombination, of a promoter replacement fragment with a heterologous
CC   promoter, so that expression of the second allele is regulated by the
CC   promoter. (M1) is useful for constructing a strain of diploid fungal
CC   cells in which both alleles of a gene are modified. The diploid fungal
CC   cells having both alleles modified are useful for identifying a gene that
CC   is essential to the survival or growth of a fungus, a gene that
CC   contributes to the virulence and/or pathogenicity of a fungus, a gene
CC   that contributes to the resistance of a diploid fungus to an antifungal
CC   agent, an antifungal agent that inhibits the growth of a diploid fungus
CC   and for identifying a therapeutic agent for treatment of a mammalian
CC   disease. (M1) is useful for identifying a compound which modulates the
CC   activity of a gene product, preferably enzymatic activity, carbon
CC   compound catabolism, biosynthetic, transporter, transcriptional,
CC   translational, signal transduction, DNA replication and cell division
CC   activity. The method is useful for identifying a compound having the
CC   ability to inhibit growth or proliferation of C. albicans cells and for
CC   treating infection by C. albicans. The present sequence is that of a PCR
CC   primer used in the method of the invention. Note: The sequence data for
CC   this patent is not represented in the printed specification but is based
CC   on sequence information supplied to Derwent by the European Patent Office
XX
SQ   Sequence 22 BP; 10 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

  Query Match             4.0%;  Score 15.8;  DB 1;  Length 22;
  Best Local Similarity   89.5%;  Pred. No. 83;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        821 TTGGCTGTGTCTCTTTTCT 839
              | |||||||||||||| |||
Db         22 TGGGCTGTGTCTCTTGTCT 4
```

```
RESULT 56
AAT69828/c
ID   AAT69828 standard; cDNA; 22 BP.
XX
AC   AAT69828;
XX
DT   05-AUG-1997  (first entry)
XX
DE   Rat farnesyl transferase enzyme beta subunit cDNA primer, beta 4.
XX
KW   Farnesyl transferase; inhibitor; cancer; tumour; neoplasia; prenyl;
KW   ras protein; K-ras B; malignant; detection; identification; PCR;
KW   polymerase chain reaction; amplification; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9634113-A2.
XX
PD   31-OCT-1996.
XX
PF   29-APR-1996;   96WO-US005969.
XX
PR   27-APR-1995;   95US-00429964.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Brown MS,  Goldstein JL,  James GL;
XX
DR   WPI; 1996-497642/49.
XX
PT   Assay for farnesyl transferase activity - by determining ability to
PT   transfer farnesyl moiety to K-Ras B protein, partic. useful for
PT   identifying inhibitors.
XX
PS   Example 3; Fig 16C; 257pp; English.
XX
CC   AAT69828 and AAT69829 are PCR primers that were used to isolate the beta
CC   subunit of a rat farnesyl transferase (FT) enzyme. The enzyme was used in
CC   a method for identifying FT inhibitors. The method involved screening
CC   candidate compounds for the ability to inhibit the transfer of a farnesyl
CC   moiety to a K-ras B protein. FT inhibitors act by blocking the attachment
CC   of prenyl groups to ras proteins in malignant cells of patients suffering
CC   from cancer or precancerous states, and as such are used to treat such
CC   conditions
XX
SQ   Sequence 22 BP; 5 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             3.9%;  Score 15.6;  DB 1;  Length 22;
  Best Local Similarity   81.8%;  Pred. No. 90;
  Matches   18;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy        625 GTTCCTGAGAGAGGCTCCTAAG 646
              |||  |||||||||||  ||  ||
Db         22 GTTGGTGAGAGAGGCTACTGAG 1
```

```
RESULT 57
ABV90403
ID   ABV90403 standard; DNA; 17 BP.
XX
AC   ABV90403;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1116.
XX
```

```
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1116; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             3.9%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 69;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        744 GTAGGGTCCCAGGGTCC 760
              ||||||  ||||||||||
Db          1 GTAGGGGCCCAGGGTCC 17


RESULT 58
AAV39569/c
ID   AAV39569 standard; cDNA; 19 BP.
XX
AC   AAV39569;
XX
DT   28-SEP-1998  (first entry)
XX
DE   Mass spectrometric analysis primer SEQ ID NO:102.
XX
KW   Mass spectrometry; diagnosis; detection; biological sample; infection;
KW   genetic disease; chromosomal abnormality; identification; heredity;
KW   pathogenic organism; telomerase activity; oncogene mutation;
KW   cancer-specific sequence; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9820166-A2.
XX
PD   14-MAY-1998.
XX
PF   06-NOV-1997;   97WO-US020444.
XX
PR   06-NOV-1996;   96US-00744481.
PR   06-NOV-1996;   96US-00744590.
PR   06-NOV-1996;   96US-00746036.
PR   06-NOV-1996;   96US-00746055.
PR   23-JAN-1997;   97US-00786988.
PR   23-JAN-1997;   97US-00787639.
PR   19-SEP-1997;   97US-00933792.
PR   08-OCT-1997;   97US-00947801.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Koster H,  Tang K,  Fu D,  Siegert CW,  Little DP,  Higgins GS;
PI   Braun A,  Damhoffer-Demar B,  Jurinke C,  Van Den Boom D,  Xiang G;
PI   Lough DM;
XX
DR   WPI; 1998-286975/25.
XX
PT   Sequencing nucleic acid by mass spectrometric analysis - for detecting
PT   nucleic acids, telomerase activity, oncogene mutations, or cancer-
PT   specific sequences, for diagnosis of disease.
XX
PS   Claim 48; Page 271; 478pp; English.
XX
CC   A process has been developed for determining the sequence of a target
CC   nucleic acid. The process comprises: (i) generating at least two
CC   fragments (F) from the target nucleic acid; and (ii) analysing F by mass
CC   spectrometry (MS). The sequences in AAV39483 to AAV39592 are specifically
CC   claimed primers for use in the mass spectrometric analysis of the above
CC   process. The process is used to detect genetic diseases (e.g.
CC   haemophilia, thalassemia, Duchenne muscular dystrophy, Alzheimer's
CC   disease, cystic fibrosis and many others) or chromosomal abnormalities
CC   (or predisposition); infections and cancers; also for establishing
CC   identity and heredity. Particular applications are diagnosis of
CC   neuroblastoma, detecting telomerase, determining family relationships and
CC   HLA compatibility, and in genetic fingerprinting. Compared with known
CC   methods using MS, this process requires fewer specific reagents and is
CC   better suited to automation. Extended primers are shorter; primer
CC   annealing is more efficient and the process allows detection of many
CC   sequences simultaneously
XX
SQ   Sequence 19 BP; 3 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             3.9%;  Score 15.4;  DB 1;  Length 19;
  Best Local Similarity   94.1%;  Pred. No. 80;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        753 CAGGGTCCCTAGGCCTC 769
              |||||||||  |||||||
Db         19 CAGGGTCCCCAGGCCTC 3


RESULT 59
AAZ71816/c
ID   AAZ71816 standard; DNA; 19 BP.
XX
AC   AAZ71816;
XX
```

DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:6172.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 1547; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 3.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 80;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 873 CACTTTCCTGAGATGCA 889
||||| ||||||||||
Db 17 CACTTCCCTGAGATGCA 1

RESULT 60
AAX96605/c
ID AAX96605 standard; DNA; 20 BP.
XX
AC AAX96605;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS Chlamydophila pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB001890.
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
PA (GEST) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of Chlamydia pneumoniae.
XX
PS Page 1839; Disclosure; 1912pp; English.
XX
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 3.9%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 86;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 728 CTGGTCATAGGACTTGG 744
||||||||||| ||||
Db 17 CTGGTCATAGGATTTGG 1

RESULT 61
ABK65743/c
ID ABK65743 standard; DNA; 21 BP.
XX
AC ABK65743;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human single nucleotide polymorphism #363.
XX
KW Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;
KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; inflammation; nervous system disorder;
KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
KW systemic lupus erythematosus; Graves disease; longevity; obesity;
KW baldness; fertility; forensic; paternity testing; ss.
XX
OS Homo sapiens.
XX
PN US2002037508-A1.
XX
PD 28-MAR-2002.
XX

PF 18-JAN-2001; 2001US-00765081.
XX
PR 19-JAN-2000; 2000US-0176861P.
XX
PA (CARG/) CARGILL M.
PA (IREL/) IRELAND J S.
PA (LAND/) LANDER E S.
XX
PI Cargill M, Ireland JS, Lander ES;
XX
DR WPI; 2002-315108/35.
XX
PT Nucleic acid comprising single nucleotide polymorphisms, useful in
PT forensics, paternity testing and diagnosis of disease.
XX
PS Claim 1; Page 81; 96pp; English.
XX
CC The invention relates to a nucleic acid comprising single nucleotide
CC polymorphisms (SNPs) associated with diseases. The nucleic acids
CC comprising the SNPs and probes and primers for detecting them may be used
CC in assays for the diagnosis of diseases associated with SNPs (such as
CC sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
CC syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
CC familial hypercholesterolaemia, polycystic kidney disease, hereditary
CC spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
CC symptoms of, or susceptibility to, multifactorial diseases of which a
CC component is or may be genetic, such as autoimmune diseases,
CC inflammation, cancer, diseases of the nervous system, and infection by
CC pathogenic microorganisms, autoimmune diseases including rheumatoid
CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
CC independent), systemic lupus erythematosus and Graves disease, cancers
CC including cancers of the bladder, brain, breast, colon, oesophagus,
CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
CC skin, stomach and uterus, longevity, appearance (e.g., baldness,
CC obesity), strength, speed, endurance, fertility, and susceptibility or
CC receptivity to particular drugs or therapeutic treatments), in forensics
CC and in paternity testing. ABK65381-ABK65841 represent human single
CC nucleotide polymorphisms of the invention
XX
SQ Sequence 21 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 1 Other;

Query Match 3.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 91;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 658 AGTCTTTCTCGAAGCTTGG 676
||||||||: |||||| ||
Db 19 AGTCTTTCYGGAAGCTGGG 1

RESULT 62
ABK49534
ID ABK49534 standard; DNA; 21 BP.
XX
AC ABK49534;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human factor VIII, mutagenesis primer #9.
XX
KW Factor VIII; haemophilia; mutagenesis; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200224723-A1.
XX
PD 28-MAR-2002.
XX
PF 19-SEP-2001; 2001WO-US029431.
XX
PR 19-SEP-2000; 2000US-0234047P.
PR 29-SEP-2000; 2000US-0236460P.
XX
PA (UYEM-) UNIV EMORY.
XX
PI Lollar JS;
XX
DR WPI; 2002-383178/41.
XX
PT Modified factor VIII for treating patients having factor VIII deficiency,
PT comprises an amino acid substitution at specified positions of a
PT corresponding non-human factor VIII amino acid.
XX
PS Example 1; Page 33; 77pp; English.
XX
CC The invention describes a modified human factor VIII (I). (I) is useful
CC for haemophiliacs either to avoid or prevent the action of inhibitory
CC antibodies. Factor VIII can also be used to treat uncontrolled bleeding
CC due to factor VIII deficiency in haemophiliacs who have developed
CC antibodies to human factor VIII. In this case, coagulant activity that is
CC superior to human or animal factor VIII alone is not necessary. Coagulant
CC activity that is inferior to that of human factor VIII (i.e., less than
CC 3000 units/mg) is useful if that activity is not neutralised by
CC antibodies in the patient's plasma. This sequence represents a
CC mutagenesis primer used to create mutant factor VIII proteins for use in
CC compositions to treat haemophilia
XX
SQ Sequence 21 BP; 8 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 3.9%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 91;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 591 GTTTTTCTACAACACAG 607
||||||||||||||| ||
Db 2 GTTTTTCTACAACAGAG 18

RESULT 63
AAQ39134/c
ID AAQ39134 standard; DNA; 20 BP.
XX
AC AAQ39134;
XX
DT 25-MAR-2003 (revised)
DT 26-JUL-1993 (first entry)
XX
DE HCV sense primer X(E2)14, 1367-1368.
XX
KW Polymerase chain reaction; PCR; amplify; primer; hepatitis C virus; HCV;
KW asymptomatic; chronically infected; epitope; viral isolate; domain;
KW immunological; cross-reactive; ss.
XX
OS Synthetic.
XX
PN WO9306126-A1.
XX
PD 01-APR-1993.
XX
PF 11-SEP-1992; 92WO-US007683.
XX
PR 13-SEP-1991; 91US-00759575.
XX
PA (CHIR) CHIRON CORP.
XX
PI Weiner AJ, Houghton M;
XX
DR WPI; 1993-117468/14.
XX
PT Immuno-reactive hepatitis C virus polypeptide compsns. - contg. at least
PT 2 sequences from the first variable domain of distinct HCV isolates.
XX
PS Disclosure; Page 44; 106pp; English.
XX

```
CC   The sequences given in AAQ39134-46 are primers which were used in the
CC   amplification and sequencing of hepatitis C virus (HCV) samples from
CC   asymptomatic and chronically infected HCV patients. Cloning of these
CC   different samples showed that a number of important HCV epitopes vary
CC   among viral isolates, and that these epitopes can be mapped to specific
CC   domains. This meant that immunologically cross- reactive polypeptides
CC   which focus on variable rather than constant domains can be produced.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        548 AGGCCTCCCCAGCGAGCTCC 567
              ||| |||||||| |||| ||
Db         20 AGGACTCCCCAGTGAGCACC 1


RESULT 64
AAT48681
ID   AAT48681 standard; DNA; 20 BP.
XX
AC   AAT48681;
XX
DT   25-MAR-2003  (revised)
DT   02-OCT-1997  (first entry)
XX
DE   Probe for detecting N-ras gene mutations in the codon at position 13.
XX
KW   Mutated codon; single base mutation; human; acute myeloid leukaemia;
KW   tumour; activated ras gene; N-ras; H-ras; K-ras; ss.
XX
OS   Synthetic.
XX
PN   US5591582-A.
XX
PD   07-JAN-1997.
XX
PF   23-JUN-1994;   94US-00264425.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Van Der Eb AJ,  Bos JL;
XX
DR   WPI; 1997-086629/08.
XX
PT   Detection of activated ras gene - using oligo:nucleotide probes to detect
PT   mutated codon.
XX
PS   Claim 24; Col 29; 20pp; English.
XX
CC   A new method has been produced for the detection of an activated ras gene
CC   containing a mutated codon. The method involves: either cleaving a human
CC   subject's genomic DNA with a restriction enzyme to produce DNA fragments
CC   and treating the fragments to obtain single-stranded DNA molecules or
CC   isolating the subject's polyA+ mRNA; contacting the single-stranded DNA
CC   molecules or polyA+ mRNA under hybridising conditions with a labelled
CC   synthetic DNA molecule, optionally bound to a solid support, comprising
CC   12-20 nucleotides, where the synthetic DNA molecule is 5'-B-Q-D-3' in the
CC   case of single-stranded DNA or is complementary to 5'-B-Q-D-3' in the
CC   case of polyA+ mRNA, B = 0-9 nucleotides having a sequence complementary
CC   to a sequence in the activated ras gene 5' of the mutated codon, D = 0-12
CC   nucleotides having a sequence complementary to a sequence in the
CC   activated ras gene 3' of the mutated codon, provided that B and D contain
CC   a total of at least 9 nucleotides, and Q is complementary to the mutated
CC   codon; treating the resulting hybridised molecules under conditions
CC   permitting only fully complementary molecules to remain hybridised; and
CC   detecting the presence of the labelled synthetic DNA molecule in the
CC   hybridised molecules. The present sequence represents the synthetic DNA
CC   probe used for detecting the activated N-ras gene when the mutated codon
CC   is at position 13 and has a single base substitution in the first or
CC   second nucleotide position so that it encodes an amino acid other than
CC   Gly. The preferred mutated codon at position 13 codes for Asn. The method
CC   can be used for the diagnosis of acute myeloid leukaemia and other
CC   tumours. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 20 BP; 4 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db          1 TTCCCAACAGCACCTGCTCC 20


RESULT 65
AAT48677
ID   AAT48677 standard; DNA; 20 BP.
XX
AC   AAT48677;
XX
DT   25-MAR-2003  (revised)
DT   02-OCT-1997  (first entry)
XX
DE   Probe for detecting N-ras gene mutations in the codon at position 12.
XX
KW   Mutated codon; single base mutation; human; acute myeloid leukaemia;
KW   tumour; activated ras gene; N-ras; H-ras; K-ras; ss.
XX
OS   Synthetic.
XX
PN   US5591582-A.
XX
PD   07-JAN-1997.
XX
PF   23-JUN-1994;   94US-00264425.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Van Der Eb AJ,  Bos JL;
XX
DR   WPI; 1997-086629/08.
XX
PT   Detection of activated ras gene - using oligo:nucleotide probes to detect
PT   mutated codon.
XX
PS   Claim 23; Col 28; 20pp; English.
XX
CC   A new method has been produced for the detection of an activated ras gene
CC   containing a mutated codon. The method involves: either cleaving a human
CC   subject's genomic DNA with a restriction enzyme to produce DNA fragments
CC   and treating the fragments to obtain single-stranded DNA molecules or
CC   isolating the subject's polyA+ mRNA; contacting the single-stranded DNA
CC   molecules or polyA+ mRNA under hybridising conditions with a labelled
CC   synthetic DNA molecule, optionally bound to a solid support, comprising
CC   12-20 nucleotides, where the synthetic DNA molecule is 5'-B-Q-D-3' in the
CC   case of single-stranded DNA or is complementary to 5'-B-Q-D-3' in the
CC   case of polyA+ mRNA, B = 0-9 nucleotides having a sequence complementary
CC   to a sequence in the activated ras gene 5' of the mutated codon, D = 0-12
CC   nucleotides having a sequence complementary to a sequence in the
CC   activated ras gene 3' of the mutated codon, provided that B and D contain
CC   a total of at least 9 nucleotides, and Q is complementary to the mutated
CC   codon; treating the resulting hybridised molecules under conditions
CC   permitting only fully complementary molecules to remain hybridised; and
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CC   detecting the presence of the labelled synthetic DNA molecule in the
CC   hybridised molecules. The present sequence represents the synthetic DNA
CC   probe used for detecting the activated N-ras gene when the mutated codon
CC   is at position 12 and has a single base substitution in the first or
CC   second nucleotide position so that it encodes an amino acid other than
CC   Gly. The method can be used for the diagnosis of acute myeloid leukaemia
CC   and other tumours. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 20 BP; 4 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match              3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              |||||||||  |  |||||||
Db          1 TTCCCAACACCAGCTGCTCC 20


RESULT 66
AAT48682
ID   AAT48682 standard; DNA; 20 BP.
XX
AC   AAT48682;
XX
DT   25-MAR-2003  (revised)
DT   02-OCT-1997  (first entry)
XX
DE   Probe for detecting N-ras gene mutations in the codon at position 13.
XX
KW   Mutated codon; single base mutation; human; acute myeloid leukaemia;
KW   tumour; activated ras gene; N-ras; H-ras; K-ras; ss.
XX
OS   Synthetic.
XX
PN   US5591582-A.
XX
PD   07-JAN-1997.
XX
PF   23-JUN-1994;   94US-00264425.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Van Der Eb AJ,  Bos JL;
XX
DR   WPI; 1997-086629/08.
XX
PT   Detection of activated ras gene - using oligo:nucleotide probes to detect
PT   mutated codon.
XX
PS   Claim 24; Col 29; 20pp; English.
XX
CC   A new method has been produced for the detection of an activated ras gene
CC   containing a mutated codon. The method involves: either cleaving a human
CC   subject's genomic DNA with a restriction enzyme to produce DNA fragments
CC   and treating the fragments to obtain single-stranded DNA molecules or
CC   isolating the subject's polyA+ mRNA; contacting the single-stranded DNA
CC   molecules or polyA+ mRNA under hybridising conditions with a labelled
CC   synthetic DNA molecule, optionally bound to a solid support, comprising
CC   12-20 nucleotides, where the synthetic DNA molecule is 5'-B-Q-D-3' in the
CC   case of single-stranded DNA or is complementary to 5'-B-Q-D-3' in the
CC   case of polyA+ mRNA, B = 0-9 nucleotides having a sequence complementary
CC   to a sequence in the activated ras gene 5' of the mutated codon, D = 0-12
CC   nucleotides having a sequence complementary to a sequence in the
CC   activated ras gene 3' of the mutated codon, provided that B and D contain
CC   a total of at least 9 nucleotides, and Q is complementary to the mutated
CC   codon; treating the resulting hybridised molecules under conditions
CC   permitting only fully complementary molecules to remain hybridised; and
CC   detecting the presence of the labelled synthetic DNA molecule in the
CC   hybridised molecules. The present sequence represents the synthetic DNA
CC   probe used for detecting the activated N-ras gene when the mutated codon
CC   is at position 13 and has a single base substitution in the first or
CC   second nucleotide position so that it encodes an amino acid other than
CC   Gly. The preferred mutated codon at position 13 codes for Asn. The method
CC   can be used for the diagnosis of acute myeloid leukaemia and other
CC   tumours. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 20 BP; 5 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match              3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              |||||||||  |  |||||||
Db          1 TTCCCAACAACACCTGCTCC 20


RESULT 67
AAT48675
ID   AAT48675 standard; DNA; 20 BP.
XX
AC   AAT48675;
XX
DT   25-MAR-2003  (revised)
DT   02-OCT-1997  (first entry)
XX
DE   Probe for detecting N-ras gene mutations in the codon at position 12.
XX
KW   Mutated codon; single base mutation; human; acute myeloid leukaemia;
KW   tumour; activated ras gene; N-ras; H-ras; K-ras; ss.
XX
OS   Synthetic.
XX
PN   US5591582-A.
XX
PD   07-JAN-1997.
XX
PF   23-JUN-1994;   94US-00264425.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Van Der Eb AJ,  Bos JL;
XX
DR   WPI; 1997-086629/08.
XX
PT   Detection of activated ras gene - using oligo:nucleotide probes to detect
PT   mutated codon.
XX
PS   Claim 23; Col 28; 20pp; English.
XX
CC   A new method has been produced for the detection of an activated ras gene
CC   containing a mutated codon. The method involves: either cleaving a human
CC   subject's genomic DNA with a restriction enzyme to produce DNA fragments
CC   and treating the fragments to obtain single-stranded DNA molecules or
CC   isolating the subject's polyA+ mRNA; contacting the single-stranded DNA
CC   molecules or polyA+ mRNA under hybridising conditions with a labelled
CC   synthetic DNA molecule, optionally bound to a solid support, comprising
CC   12-20 nucleotides, where the synthetic DNA molecule is 5'-B-Q-D-3' in the
CC   case of single-stranded DNA or is complementary to 5'-B-Q-D-3' in the
CC   case of polyA+ mRNA, B = 0-9 nucleotides having a sequence complementary
CC   to a sequence in the activated ras gene 5' of the mutated codon, D = 0-12
CC   nucleotides having a sequence complementary to a sequence in the
CC   activated ras gene 3' of the mutated codon, provided that B and D contain
CC   a total of at least 9 nucleotides, and Q is complementary to the mutated
CC   codon; treating the resulting hybridised molecules under conditions
CC   permitting only fully complementary molecules to remain hybridised; and
CC   detecting the presence of the labelled synthetic DNA molecule in the
```

```
CC   hybridised molecules. The present sequence represents the synthetic DNA
CC   probe used for detecting the activated N-ras gene when the mutated codon
CC   is at position 12 and has a single base substitution in the first or
CC   second nucleotide position so that it encodes an amino acid other than
CC   Gly. The method can be used for the diagnosis of acute myeloid leukaemia
CC   and other tumours. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 20 BP; 5 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db          1 TTCCCAACACCAACTGCTCC 20


RESULT 68
AAV73035
ID   AAV73035 standard; DNA; 20 BP.
XX
AC   AAV73035;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene probe #10.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 4-5; 18pp; English.
XX
CC   AAV73026-V73071 are probes used to detect a single-base mutation in a
CC   human ras oncogene. These probes comprise 12-43 nucleotides of formula 5'
CC   -B-Q-D-3', Q = 3 nucleotides complementary to the mutated codon, and B
CC   and D each = 0-20 nucleotides complementary to the ras sequences flanking
CC   the mutated codon. The probes are useful for detecting cancers associated
CC   with point mutations
XX
SQ   Sequence 20 BP; 4 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db          1 TTCCCAACACCAGCTGCTCC 20


RESULT 69
AAV73136/c
ID   AAV73136 standard; DNA; 20 BP.
XX
AC   AAV73136;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene mutant detecting oligomer N-13f.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 19-20; 18pp; English.
XX
CC   AAV73084-V73145 are oligomers used in a method to detect a single-base
CC   mutation in a human ras oncogene. These probes comprise 12-43 nucleotides
CC   of formula 5'-B-Q-D-3', Q = 3 nucleotides complementary to the mutated
CC   codon, and B and D each = 0-20 nucleotides complementary to the ras
CC   sequences flanking the mutated codon. The probes are useful for detecting
CC   cancers associated with point mutations
XX
SQ   Sequence 20 BP; 4 A; 1 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db         20 TTCCCAACAACACCTGCTCC 1


RESULT 70
AAV73029
ID   AAV73029 standard; DNA; 20 BP.
XX
AC   AAV73029;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene probe #4.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
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PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Claim 5; Col 4; 18pp; English.
XX
CC   AAV73026-V73071 are probes used to detect a single-base mutation in a
CC   human ras oncogene. These probes comprise 12-43 nucleotides of formula 5'
CC   -B-Q-D-3', Q = 3 nucleotides complementary to the mutated codon, and B
CC   and D each = 0-20 nucleotides complementary to the ras sequences flanking
CC   the mutated codon. The probes are useful for detecting cancers associated
CC   with point mutations
XX
SQ   Sequence 20 BP; 4 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match              3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db          1 TTCCCAACAGCACCTGCTCC 20


RESULT 71
AAV73030
ID   AAV73030 standard; DNA; 20 BP.
XX
AC   AAV73030;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene probe #5.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Claim 5; Col 4; 18pp; English.
XX
CC   AAV73026-V73071 are probes used to detect a single-base mutation in a
CC   human ras oncogene. These probes comprise 12-43 nucleotides of formula 5'
CC   -B-Q-D-3', Q = 3 nucleotides complementary to the mutated codon, and B
CC   and D each = 0-20 nucleotides complementary to the ras sequences flanking
CC   the mutated codon. The probes are useful for detecting cancers associated
CC   with point mutations
XX
SQ   Sequence 20 BP; 5 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match              3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db          1 TTCCCAACAACACCTGCTCC 20


RESULT 72
AAV73134/c
ID   AAV73134 standard; DNA; 20 BP.
XX
AC   AAV73134;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene mutant detecting oligomer N-13d.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 19-20; 18pp; English.
XX
CC   AAV73084-V73145 are oligomers used in a method to detect a single-base
CC   mutation in a human ras oncogene. These probes comprise 12-43 nucleotides
CC   of formula 5'-B-Q-D-3', Q = 3 nucleotides complementary to the mutated
CC   codon, and B and D each = 0-20 nucleotides complementary to the ras
CC   sequences flanking the mutated codon. The probes are useful for detecting
CC   cancers associated with point mutations
XX
SQ   Sequence 20 BP; 4 A; 2 C; 10 G; 4 T; 0 U; 0 Other;

  Query Match              3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db         20 TTCCCAACAGCACCTGCTCC 1


RESULT 73
AAV73037
ID   AAV73037 standard; DNA; 20 BP.
XX
```

```
AC   AAV73037;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene probe #12.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 4-5; 18pp; English.
XX
CC   AAV73026-V73071 are probes used to detect a single-base mutation in a
CC   human ras oncogene. These probes comprise 12-43 nucleotides of formula 5'
CC   -B-Q-D-3', Q = 3 nucleotides complementary to the mutated codon, and B
CC   and D each = 0-20 nucleotides complementary to the ras sequences flanking
CC   the mutated codon. The probes are useful for detecting cancers associated
CC   with point mutations
XX
SQ   Sequence 20 BP; 5 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db          1 TTCCCAACACCAACTGCTCC 20


RESULT 74
AAV73128/c
ID   AAV73128 standard; DNA; 20 BP.
XX
AC   AAV73128;
XX
DT   09-FEB-1999  (first entry)
XX
DE   Human ras oncogene mutant detecting oligomer N-13.
XX
KW   Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS   Synthetic.
XX
PN   US5847095-A.
XX
PD   08-DEC-1998.
XX
PF   03-JAN-1997;   97US-00778543.
XX
PR   23-JUL-1985;   85US-00758104.
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 19-20; 18pp; English.
XX
CC   AAV73084-V73145 are oligomers used in a method to detect a single-base
CC   mutation in a human ras oncogene. These probes comprise 12-43 nucleotides
CC   of formula 5'-B-Q-D-3', Q = 3 nucleotides complementary to the mutated
CC   codon, and B and D each = 0-20 nucleotides complementary to the ras
CC   sequences flanking the mutated codon. The probes are useful for detecting
CC   cancers associated with point mutations
XX
SQ   Sequence 20 BP; 4 A; 1 C; 11 G; 4 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||| |  |||||||
Db         20 TTCCCAACACCACCTGCTCC 1


RESULT 75
ABL45060
ID   ABL45060 standard; DNA; 20 BP.
XX
AC   ABL45060;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:2104.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 46; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
```

```
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention
XX
SQ   Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        869 GGAACACTTTCCTGAGATGC 888
              |||| || ||||||| ||||
Db          1 GGAAAACATTCCTGACATGC 20


RESULT 76
ABI93352
ID   ABI93352 standard; DNA; 20 BP.
XX
AC   ABI93352;
XX
DT   15-FEB-2002  (first entry)
XX
DE   Capture oligonucleptide Zip ID#439 oligo #9.
XX
KW   Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW   ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW   infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW   oncogene; tumour suppressor; human papillomavirus; forensic;
KW   environmental monitoring; food industry; feed industry; ss.
XX
OS   Synthetic.
XX
PN   WO200179548-A2.
XX
PD   25-OCT-2001.
XX
PF   04-APR-2001; 2001WO-US010958.
XX
PR   14-APR-2000; 2000US-0197271P.
XX
PA   (CORR ) CORNELL RES FOUND INC.
XX
PI   Barany F,  Zirvi M,  Gerry NP,  Favis R,  Kliman R;
XX
DR   WPI; 2002-034366/04.
XX
PT   Designing capture oligonucleotide probes for use on a support to which
PT   complementary oligonucleotides hybridize with little mismatch.
XX
PS   Example 5; Fig 29; 300pp; English.
XX
CC   The present invention describes a method (M1) for designing capture
CC   oligonucleotide probes (I) for use on a support to which complementary
CC   oligonucleotide probes (II) will hybridise with little mismatch, where
CC   (I) have melting temperatures within a narrow range. The method is useful
CC   for detecting infectious diseases caused by bacterial infectious agents
CC   e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC   infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC   Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC   Epstein-Barr virus and polio virus, and parasitic infectious agents
CC   selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC   medinesis. The method is also useful for detecting genetic diseases such
CC   as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC   Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC   involved in DNA amplification, replication, recombination or repair, the
CC   cancer is specifically associated with a gene selected from BRCA1 gene,
CC   p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC   method is also used for environmental monitoring, forensics and the food
CC   and feed industry, detecting comprises scanning (using e.g. a scanning
CC   electron microscope and infrared microscope) the support at the
CC   particular sites and identifying if ligation of the oligonucleotide probe
CC   sets occurred and correlating (using a computer) identified ligation to a
CC   presence or absence of the target nucleotide sequences. ABI82074 to
CC   ABI97546 represent oligonucleotide sequences used in the exemplification
CC   of the present invention
XX
SQ   Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        705 CAGCGAGTCCCAGGAGAGTG 724
              |||||||||| ||| ||||
Db          1 CAGCGAGTCCATGGACAGTG 20


RESULT 77
ABT33824
ID   ABT33824 standard; DNA; 20 BP.
XX
AC   ABT33824;
XX
DT   29-MAY-2003  (first entry)
XX
DE   Human DNA MeTase DNM3a oligo SEQ ID No 20.
XX
KW   Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform;
KW   gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor;
KW   cell proliferation; neoplasia; human DNA MeTase DNMT 1; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200291926-A2.
XX
PD   21-NOV-2002.
XX
PF   13-MAY-2002; 2002WO-IB003120.
XX
PR   11-MAY-2001; 2001US-0290202P.
PR   11-MAY-2001; 2001US-0290212P.
XX
PA   (METH-) METHYLGENE INC.
XX
PI   Macleod AR;
XX
DR   WPI; 2003-148369/14.
XX
PT   New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl
PT   transferase oligonucleotides or small molecule inhibitors of DNA methyl
PT   transferase, useful for treating cell proliferative and differentiation
PT   disorders.
XX
PS   Claim 14; Page 23; 76pp; English.
XX
CC   The invention relates to an agent that inhibits one or more specific DNA
CC   methyl transferase isoforms (but not all DNA methyl transferase
CC   isoforms), such as an anti-DNA methyl transferase oligonucleotide or a
CC   small molecule inhibitor of DNA methyl transferase. The agents,
CC   oligonucleotides, inhibitors and methods are useful for identifying
CC   specific inhibition of specific DNA methyl transferase isoforms involved
CC   in cell proliferation and/or differentiation, and thus providing a
CC   treatment for cell proliferative and/or differentiation disorders, e.g.
CC   neoplasia. This polynucleotide sequence represents a human DNA MeTase
CC   DNMT 1 oligo relating to the invention
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 4 T; 1 U; 0 Other;
```

```
  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   80.0%;  Pred. No. 93;
  Matches   16;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 CGTCCTGGCTCCAGTTGGAA 872
              ||:| ||||||||||| ||
Db          1 CGUCGTGGCTCCAGTTACAA 20


RESULT 78
ABT33852
ID   ABT33852 standard; DNA; 20 BP.
XX
AC   ABT33852;
XX
DT   29-MAY-2003  (first entry)
XX
DE   DNMT3a oligonucleotide #5.
XX
KW   Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform;
KW   gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor;
KW   cell proliferation; neoplasia; DNMT 3a; enzyme; ds.
XX
OS   Unidentified.
XX
PN   WO200291926-A2.
XX
PD   21-NOV-2002.
XX
PF   13-MAY-2002; 2002WO-IB003120.
XX
PR   11-MAY-2001; 2001US-0290202P.
PR   11-MAY-2001; 2001US-0290212P.
XX
PA   (METH-) METHYLGENE INC.
XX
PI   Macleod AR;
XX
DR   WPI; 2003-148369/14.
XX
PT   New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl
PT   transferase oligonucleotides or small molecule inhibitors of DNA methyl
PT   transferase, useful for treating cell proliferative and differentiation
PT   disorders.
XX
PS   Disclosure; Fig 4; 76pp; English.
XX
CC   The invention relates to an agent that inhibits one or more specific DNA
CC   methyl transferase isoforms (but not all DNA methyl transferase
CC   isoforms), such as an anti-DNA methyl transferase oligonucleotide or a
CC   small molecule inhibitor of DNA methyl transferase. The agents,
CC   oligonucleotides, inhibitors and methods are useful for identifying
CC   specific inhibition of specific DNA methyl transferase isoforms involved
CC   in cell proliferation and/or differentiation, and thus providing a
CC   treatment for cell proliferative and/or differentiation disorders, e.g.
CC   neoplasia. This polynucleotide sequence represents a DNMT3a oligo
CC   sequence relating to the invention
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 CGTCCTGGCTCCAGTTGGAA 872
              |||| ||||||||||| ||
Db          1 CGTCGTGGCTCCAGTTACAA 20


RESULT 79
ABT33822
ID   ABT33822 standard; DNA; 20 BP.
XX
AC   ABT33822;
XX
DT   29-MAY-2003  (first entry)
XX
DE   Human DNA MeTase DNM3a oligo SEQ ID No 18.
XX
KW   Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform;
KW   gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor;
KW   cell proliferation; neoplasia; human DNA MeTase DNMT 1; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200291926-A2.
XX
PD   21-NOV-2002.
XX
PF   13-MAY-2002; 2002WO-IB003120.
XX
PR   11-MAY-2001; 2001US-0290202P.
PR   11-MAY-2001; 2001US-0290212P.
XX
PA   (METH-) METHYLGENE INC.
XX
PI   Macleod AR;
XX
DR   WPI; 2003-148369/14.
XX
PT   New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl
PT   transferase oligonucleotides or small molecule inhibitors of DNA methyl
PT   transferase, useful for treating cell proliferative and differentiation
PT   disorders.
XX
PS   Claim 14; Page 23; 76pp; English.
XX
CC   The invention relates to an agent that inhibits one or more specific DNA
CC   methyl transferase isoforms (but not all DNA methyl transferase
CC   isoforms), such as an anti-DNA methyl transferase oligonucleotide or a
CC   small molecule inhibitor of DNA methyl transferase. The agents,
CC   oligonucleotides, inhibitors and methods are useful for identifying
CC   specific inhibition of specific DNA methyl transferase isoforms involved
CC   in cell proliferation and/or differentiation, and thus providing a
CC   treatment for cell proliferative and/or differentiation disorders, e.g.
CC   neoplasia. This polynucleotide sequence represents a human DNA MeTase
CC   DNMT 1 oligo relating to the invention
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 93;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 CGTCCTGGCTCCAGTTGGAA 872
              |||| ||||||||||| ||
Db          1 CGTCGTGGCTCCAGTTACAA 20


RESULT 80
ACA90208/c
ID   ACA90208 standard; DNA; 20 BP.
XX
AC   ACA90208;
XX
DT   10-JUL-2003  (first entry)
XX
DE   Novel human protein identification related primer #7.
XX
KW   Human; cytostatic; DAPK3-Agonist; DAPK3-Antagonist; cancer; NOV; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003031571-A2.
```

XX
PD 17-APR-2003.
XX
PF 02-OCT-2002; 2002WO-US031357.
XX
PR 05-OCT-2001; 2001US-0327454P.
PR 09-OCT-2001; 2001US-0327917P.
PR 09-OCT-2001; 2001US-0328029P.
PR 09-OCT-2001; 2001US-0328056P.
PR 12-OCT-2001; 2001US-0328849P.
PR 15-OCT-2001; 2001US-0329414P.
PR 17-OCT-2001; 2001US-0330142P.
PR 22-OCT-2001; 2001US-0341058P.
PR 24-OCT-2001; 2001US-0343629P.
PR 29-OCT-2001; 2001US-0349575P.
PR 01-NOV-2001; 2001US-0346357P.
PR 25-JUN-2002; 2002US-0391342P.
PR 01-OCT-2002; 2002US-00262445.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Alsobrook JP, Burgess CE, Catterton E, Chant JS, Chaudhuri A;
PI Edinger SR, Gerlach VL, Giot L, Gorman L, Guo X, Kekuda R;
PI Mezes PS, Millet I, Ooi CE, Patturajan M, Rieger DK, Spytek KA;
PI Taupier RJ, Zerhusen BD, Zhong H, Zhong M;
XX
DR WPI; 2003-381704/36.
XX
PT New DAPK3 polypeptide, useful for preparing a composition for treating or
PT preventing e.g., cancer.
XX
PS Example 20C; Page 194; 253pp; English.
XX
CC The invention describes an isolated polypeptide comprising any of 33 90-
CC 1273 amino acid sequences (I) given in the specification or its mature
CC form, a sequence that is at least 95 % identical to (I), or a sequence
CC comprising one or more conservative substitutions in the amino acid
CC sequence of (I). The polypeptide is useful for preparing a composition
CC for treating or preventing e.g. cancer. This sequence represents a primer
CC used to isolate DNA encoding a novel human NOV protein
XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 3.8%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 93;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 612 CTGACTCTGCCTGGTTCCTG 631
|| ||||||| ||||||| ||
Db 20 CAGACTCTGGCTGGTTCATG 1

RESULT 81
AAZ11784
ID AAZ11784 standard; DNA; 21 BP.
XX
AC AAZ11784;
XX
DT 23-NOV-1999 (first entry)
XX
DE Oligonucleotide primer JB676.
XX
KW internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
KW primer; detection; plant disease; crop protection; ss.
XX
OS Synthetic.
OS Pyrenophora tritici-repentis.
XX
PN WO9942609-A1.
XX
PD 26-AUG-1999.
XX
PF 18-FEB-1999; 99WO-EP001058.
XX
PR 20-FEB-1998; 98US-00026601.
XX
PA (NOVS) NOVARTIS AG.
PA (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX
PI Beck JJ;
XX
DR WPI; 1999-527487/44.
XX
PT New internal transcribed spacer DNA from fungal pathogens, used as
PT sources of primers and probes for pathogen detection.
XX
PS Claim 13; Page 18; 40pp; English.
XX
CC This primer can be used in the amplification-based detection of a fungal
CC Internal Transcribed Spacer (ITS) DNA sequence. This sequence was derived
CC from the ITS sequences, specifically from the regions of the ITS which
CC exhibit the greatest difference among the fungal pathotypes. This allows
CC the identification of specific pathogens and provides a method for
CC detecting them
XX
SQ Sequence 21 BP; 5 A; 4 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 3.8%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 99;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 707 GCGAGTCCCAGGAGAGTGAC 726
||||||| | |||||| |||
Db 2 GCGAGTCTCGGGAGAGAGAC 21

RESULT 82
AAC83339/c
ID AAC83339 standard; DNA; 21 BP.
XX
AC AAC83339;
XX
DT 26-FEB-2001 (first entry)
XX
DE Primer 6A4N2.
XX
KW Prostate specific androgen regulated protein; ARSDR1; TMPRSS2; PART-1;
KW neoplastic; ss.
XX
OS Unidentified.
XX
PN WO200065067-A2.
XX
PD 02-NOV-2000.
XX
PF 21-APR-2000; 2000WO-US010920.
XX
PR 23-APR-1999; 99US-0130778P.
PR 30-AUG-1999; 99US-0151585P.
PR 30-DEC-1999; 99US-0174003P.
PR 24-JAN-2000; 2000US-0177751P.
XX
PA (UNIW) UNIV WASHINGTON.
XX
PI Nelson PS, Hood L, Lin B;
XX
DR WPI; 2000-679676/66.
XX
PT Polynucleotide encoding prostate specific androgen regulated polypeptides
PT and inhibitor of the peptides useful for treating or reducing the
PT progression of prostate neoplastic condition in an individual.
XX
PS Example 4; Page 51; 121pp; English.
XX
CC The present invention relates to prostate specific androgen regulated
CC proteins. The invention may be used to determine an expression level of

```
CC   the prostate-specific proteins ARSDR1, TMPRSS2, or PART-1 in a fluid
CC   sample or prostate cell sample from an individual. It may also be used
CC   for diagnosing and predicting the susceptibility of a prostate neoplastic
CC   condition in an individual. Inhibitors of the proteins are useful for
CC   treating or preventing the progression of a prostate neoplastic condition
XX
SQ   Sequence 21 BP; 4 A; 2 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 21;
  Best Local Similarity   85.0%;  Pred. No. 99;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        530 CCAACATCCTCTGCTCCTAG 549
              ||||||||||||  | || ||
Db         20 CCAACATCCTCTTCACCCAG 1


RESULT 83
ABN84011
ID   ABN84011 standard; DNA; 21 BP.
XX
AC   ABN84011;
XX
DT   29-AUG-2003  (revised)
DT   10-SEP-2002  (first entry)
XX
DE   Zebrafish foggy wild-type DNA fragment.
XX
KW   Foggy; zebrafish; neuron; transcription elongation factor;
KW   antiparkinsonian; neuroleptic; antiaddictive; tranquillizer; vulnerary;
KW   analgesic; antidepressant; neuroleptic; gene; ds.
XX
OS   Danio rerio.
XX
FH   Key             Location/Qualifiers
FT   CDS             1. .21
FT                   /*tag=  a
FT                   /partial
FT                   /note= "the CDS does not include a start or stop codon"
FT   mutation        replace(11,A)
FT                   /*tag=  b
XX
PN   WO200238601-A2.
XX
PD   16-MAY-2002.
XX
PF   01-NOV-2001; 2001WO-US046209.
XX
PR   03-NOV-2000; 2000US-0245687P.
PR   14-NOV-2000; 2000US-0249079P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Guo S,  Rosenthal A;
XX
DR   WPI; 2002-519295/55.
DR   P-PSDB; ABB76493.
XX
PT   Forming dopaminergic or serotonergic neurons useful for treating e.g.
PT   Parkinson's disease, by contacting neuroprogenitor cells with of
PT   zebrafish transcription elongation factor, foggy polypeptide or its
PT   antagonist.
XX
PS   Example 1; Fig 6D; 101pp; English.
XX
CC   The present sequence is a portion of the wild-type zebrafish foggy gene
CC   (see also ABN84010). A single nucleotide change from T to A within this
CC   region changes the encoded amino acid from Val-1012 to Asp and is
CC   responsible for the foggy mutant phenotype. Foggy is a transcription
CC   elongation factor that is essential for proper neuronal development.
CC   Mutant organisms producing defective foggy polypeptide show deficits in
CC   hypothalamic and retinal dopaminergic neurons, hindbrain noradrenergic
CC   neurons and neural crest-derived sympathetic neurons, but an increase in
CC   the number of serotonergic neurons. The invention provides methods of
CC   forming dopaminergic neurons by contacting neuroprogenitor cells with
CC   foggy polypeptide in vitro, and of forming serotonergic neurons by
CC   contacting neuroprogenitor cells with foggy polypeptide antagonists in
CC   vitro. The pretreated neuroprogenitor cells are transplanted into a
CC   mammal to treat disorders characterised by degeneration of dopaminergic
CC   or serotonergic neurons. (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ   Sequence 21 BP; 3 A; 4 C; 4 G; 10 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 15.2;  DB 1;  Length 21;
  Best Local Similarity   85.0%;  Pred. No. 99;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        583 TTTGTTCTGTTTTTCTACAA 602
              | || ||||||||||| |||
Db          2 TGTGCTCTGTTTTTCTGCAA 21


RESULT 84
ADE65750/c
ID   ADE65750 standard; RNA; 19 BP.
XX
AC   ADE65750;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human c-fos siNA lower strand, SEQ ID NO:205.
XX
KW   RNA interference; short interfering nucleic acid; siNA;
KW   short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW   short hairpin RNA; shRNA; expression modulation; gene therapy;
KW   drug screening; diagnosis; therapeutic target identification;
KW   pharmacogenomics; gene function analysis; gene mapping;
KW   central nervous system disorder; Alzheimer's disease;
KW   Parkinson's disease; Huntington's disease; epilepsy; dementia;
KW   amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;
KW   polycystic kidney disease; inflammatory disease; allergic disease;
KW   viral infection; HIV infection; autoimmune disease; transplant rejection;
KW   vasotropic; nootropic; antiparkinsonian; neuroprotective; cytostatic;
KW   antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;
KW   anticonvulsant; nephrotropic; human; c-fos; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003070914-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US005162.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI   Mcswiggen J,  Beigelman L;
XX
DR   WPI; 2003-679877/64.
XX
PT   New short interfering nucleic acid downregulates expression of the c-fos
PT   gene useful for treatment and diagnosis of diseases, e.g. cancer and
PT   inflammation.
XX
PS   Example 3; SEQ ID NO 205; 145pp; English.
XX
CC   The invention relates to short interfering nucleic acids (siNA) which
CC   downregulate expression of the human c-fos gene by RNA interference. The
```

CC siNAs may or may not comprise ribonucleotides and may be double or single
CC stranded. They further comprise sense and antisense regions, or
CC alternatively are assembled from a sense oligonucleotide and an antisense
CC oligonucleotide. Specifically, the siNAs include short interfering RNA
CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA
CC (shRNA). The siNAs can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC of siNA; and vectors that express siNA. The siNAs are used to modulate
CC expression of the c-fos gene in cells, tissue explants or organisms
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
CC treatment of a variety of conditions. They may be used for treating
CC central nervous system lesions and injuries (e.g., Alzheimer's disease,
CC Parkinson's disease, Huntington's disease, epilepsy, dementia or
CC amyotrophic lateral sclerosis); various cancers; other proliferative
CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory
CC and/or allergic diseases; viral infections (including HIV infection);
CC autoimmune diseases; and transplant rejection. The siNAs are also useful
CC for drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the lower strand of a human c-fos-
CC targeted double-stranded siNA.
XX
SQ Sequence 19 BP; 12 A; 2 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 3.8%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 825 CTGTGTCTCTTTTCT 839
||||||||||||||| |
Db 19 CTGTGTCTCTTTTCT 5

RESULT 85
ADE65634
ID ADE65634 standard; RNA; 19 BP.
XX
AC ADE65634;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human c-fos transcript target sequence/siNA upper strand, SEQ ID NO:89.
XX
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping;
KW central nervous system disorder; Alzheimer's disease;
KW Parkinson's disease; Huntington's disease; epilepsy; dementia;
KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV infection; autoimmune disease; transplant rejection;
KW vasotropic; nootropic; antiparkinsonian; neuroprotective; cytostatic;
KW antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;
KW anticonvulsant; nephrotropic; human; c-fos; target sequence; ss.
XX
OS Homo sapiens.
XX
PN WO2003070914-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005162.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-679877/64.
XX
PT New short interfering nucleic acid downregulates expression of the c-fos
PT gene useful for treatment and diagnosis of diseases, e.g. cancer and
PT inflammation.
XX
PS Example 3; SEQ ID NO 89; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human c-fos gene by RNA interference. The
CC siNAs may or may not comprise ribonucleotides and may be double or single
CC stranded. They further comprise sense and antisense regions, or
CC alternatively are assembled from a sense oligonucleotide and an antisense
CC oligonucleotide. Specifically, the siNAs include short interfering RNA
CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA
CC (shRNA). The siNAs can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC of siNA; and vectors that express siNA. The siNAs are used to modulate
CC expression of the c-fos gene in cells, tissue explants or organisms
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
CC treatment of a variety of conditions. They may be used for treating
CC central nervous system lesions and injuries (e.g., Alzheimer's disease,
CC Parkinson's disease, Huntington's disease, epilepsy, dementia or
CC amyotrophic lateral sclerosis); various cancers; other proliferative
CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory
CC and/or allergic diseases; viral infections (including HIV infection);
CC autoimmune diseases; and transplant rejection. The siNAs are also useful
CC for drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human c-fos-
CC targeted double-stranded siNA, which is identical to the c-fos transcript
CC target sequence.
XX
SQ Sequence 19 BP; 0 A; 5 C; 2 G; 0 T; 12 U; 0 Other;

Query Match 3.8%; Score 15; DB 1; Length 19;
Best Local Similarity 40.0%; Pred. No. 94;
Matches 6; Conservative 9; Mismatches 0; Indels 0; Gaps 0;

Qy 825 CTGTGTCTCTTTTCT 839
|:|:|:|:|::::|:
Db 1 CUGUGUCUCUUUUCU 15

RESULT 86
AAT56759/c
ID AAT56759 standard; RNA; 18 BP.
XX
AC AAT56759;
XX
DT 25-MAR-2003 (revised)
DT 02-APR-1997 (first entry)
XX
DE Mouse TNF-alpha hairpin ribozyme target sequence (nt position 1393).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;

```
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Mus musculus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 262; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC   the nucleotide base position indicated in the DE line. Regions of the
CC   mRNA that do not form secondary folding structures and that contain
CC   potential hammerhead and hairpin ribozyme cleavage sites were identified
CC   by computer analysis. Ribozymes directed against these mRNA sequences
CC   were designed and synthesised with modifications that improve their
CC   nuclease resistance. The ribozymes are designed to cleave the target
CC   sequences and thereby inhibit TNF-alpha expression, making them
CC   potentially useful for treating rheumatoid arthritis, septic shock and
CC   other inflammatory disorders including psoriasis, as well as for
CC   treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 18 BP; 5 A; 4 C; 5 G; 0 T; 4 U; 0 Other;

  Query Match             3.7%;  Score 14.8;  DB 1;  Length 18;
  Best Local Similarity   88.9%;  Pred. No. 94;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        840 TCTCTGAAGACAGCGTCC 857
              | |||||||||||| |||
Db         18 TGTCTGAAGACAGCTTCC 1


RESULT 87
AAA84990
ID   AAA84990 standard; DNA; 19 BP.
XX
AC   AAA84990;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Cyclin G1 ribozyme binding site #15.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 85; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 1 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             3.7%;  Score 14.8;  DB 1;  Length 19;
  Best Local Similarity   88.9%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        537 CCTCTGCTCCTAGGCCTC 554
              ||||| ||| ||||||||
Db          2 CCTCTCCTCGTAGGCCTC 19


RESULT 88
AAH60152
ID   AAH60152 standard; DNA; 19 BP.
XX
AC   AAH60152;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cyclin G1 ribozyme binding site SEQ ID NO:2576.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
```

KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 259; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 1 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 537 CCTCTGCTCCTAGGCCTC 554
||||| ||| ||||||||
Db 2 CCTCTCCTCGTAGGCCTC 19

RESULT 89
AAX36894
ID AAX36894 standard; DNA; 20 BP.
XX
AC AAX36894;
XX
DT 14-JUL-1999 (first entry)
XX
DE Human XLIS gene fragment PCR primer 7 F.
XX
KW XLIS gene; human; detection; diagnosis; prenatal diagnosis; therapy;
KW lissencephaly; LIS; agyria-pachygyria; subcortical laminar heterotopia;
KW SCLH; cortical dysgenesis; cryptogenic epilepsy; neurological disorder;
KW neurodegenerative disease; Alzheimer's disease; X-linked disorder;
KW genetic counselling; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN EP918091-A1.
XX
PD 26-MAY-1999.
XX
PF 21-NOV-1997; 97EP-00402811.
XX
PR 21-NOV-1997; 97EP-00402811.
XX
PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
XX
PI Chelly J, Kahn A, Des Portes V, Pinard J;
XX
DR WPI; 1999-290318/25.
XX
PT New gene and its gene product expressed in the brain, useful for
PT diagnosing and treating disorders such as lissencephaly and subcortical
PT laminar heterotopia.
XX
PS Claim 9; Page 50; 71pp; English.
XX
CC This sequence is a primer for the human XLIS gene of the invention. The
CC XLIS fragments may be used to detect abnormalities in the expression of
CC the XLIS gene transcripts or to compare their sequence with that of the
CC XLIS transcripts from patients for in vitro especially prenatal diagnosis
CC of lissencephaly (LIS) (or agyria-pachygyria), subcortical laminar
CC heterotopia (SCLH), cortical dysgenesis, cryptogenic epilepsies or
CC neurodegenerative diseases such as Alzheimer's disease. These disorders
CC mainly affect females as the XLIS gene is X-linked. The XLIS fragments
CC may also be used to administer to patients to prevent or treat the above
CC disorders and may be used as a tool in genetic counselling.
CC Oligonucleotides which bind to the fragments may be used to amplify the
CC XLIS gene from a sample for comparison to normal samples in the in vitro
CC diagnosis regime. This may also be performed by amplifying XLIS cDNA from
CC the mRNA in the sample. Antibodies to XLIS may be used to detect XLIS in
CC a biological sample or can be administered to patients to prevent or
CC treat the above disorders. They may also be used to purify XLIS from a
CC biological sample. XLIS may also be administered to patients to prevent
CC or treat the above neurological disorders. In addition XLIS may be used
CC as a marker of neuronal cells at an early stage of development; its
CC discovery increases understanding of both the neuronal movement which
CC leads to development of the cortical region of the brain and of the
CC pathogenesis of the group of neuronal disorders mentioned above
XX
SQ Sequence 20 BP; 2 A; 6 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 825 CTGTGTCTCTTTTCTTCT 842
|| |||||||| ||||||
Db 3 CTTTGTCTCTTCTCTTCT 20

RESULT 90
ABK40432
ID ABK40432 standard; DNA; 20 BP.
XX
AC ABK40432;
XX
DT 15-JUL-2002 (first entry)
XX
DE Forward PCR primer for gene amplification analysis of human PRO542.
XX
KW Human; PRO; benign tumour; malignant tumour; lymphoid malignancy;
KW leukaemia; neuronal disorder; stromal disorder; blastocoelic disorder;
KW inflammatory disorder; immune disorder; angiogenic disorder; cytostatic;

```
KW   neuroprotective; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153486-A1.
XX
PD   26-JUL-2001.
XX
PF   11-FEB-2000; 2000WO-US003565.
XX
PR   08-MAR-1999;   99WO-US005028.
PR   11-MAR-1999;   99US-0123972P.
PR   11-MAY-1999;   99US-0133459P.
PR   02-JUN-1999;   99WO-US012252.
PR   22-JUN-1999;   99US-0140650P.
PR   22-JUN-1999;   99US-0140653P.
PR   20-JUL-1999;   99US-0144758P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   17-AUG-1999;   99US-0149395P.
PR   31-AUG-1999;   99US-0151689P.
PR   01-SEP-1999;   99WO-US020111.
PR   15-SEP-1999;   99WO-US021090.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   05-JAN-2000; 2000WO-US000219.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Goddard A,  Godowski PJ,  Gurney AL,  Hillan KJ;
PI   Marsters SA,  Pan J,  Pitti RM,  Roy MA,  Smith V,  Stone DM;
PI   Watanabe CK,  Wood WI;
XX
DR   WPI; 2002-205567/26.
XX
PT   Thirty five nucleic acids encoding PRO polypeptides, useful for treating
PT   benign or malignant tumors, leukemias and lymphoid malignancies,
PT   inflammatory, angiogenic and immunologic disorders.
XX
PS   Example 26; Page 145; 302pp; English.
XX
CC   The present invention relates to the isolation of novel human PRO
CC   polypeptides (AAU86128-AAU86162) and the polynucleotide sequences
CC   encoding them. The PRO polypeptides, agonists, antagonists or anti-PRO
CC   antibodies are useful for treating benign or malignant tumours (e.g.
CC   renal, kidney, bladder, breast, etc), leukaemias and lymphoid
CC   malignancies, other disorders such as neuronal, glial, astrocytal,
CC   hypothalamic, glandular, macrophagal, stromal and blastocoelic disorders,
CC   inflammatory, immune and angiogenic disorders. The polynucleotide
CC   sequences are also useful in gene therapy. The present sequence
CC   represents a PRO primer used in the methods of the present invention
XX
SQ   Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             3.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        760 CCTAGGCCTCCACTTCTG 777
              ||| |||||||| |||||
Db          1 CCTTGGCCTCCATTTCTG 18


RESULT 91
ABL44750/c
ID   ABL44750 standard; DNA; 20 BP.
XX
AC   ABL44750;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:1794.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 40; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention
XX
SQ   Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        778 AGGGCAGCCCCTCTGGTG 795
              |||||||||| ||||| ||
Db         19 AGGGCAGCCTCTCTGATG 2


RESULT 92
ABX03479
ID   ABX03479 standard; DNA; 20 BP.
XX
AC   ABX03479;
XX
DT   08-JAN-2003  (first entry)
XX
DE   Negative-sense single stranded RNA virus RT-PCR primer #14.
XX
KW   Negative-sense single stranded RNA virus; paramyxovirus; pneumovirus; ss;
KW   virucide; MPV; Metapneumovirus; respiratory tract illness; APV infection;
KW   APV; avian pneumovirus; MPV infection; reverse transcriptase; primer;
KW   RT-PCR.
XX
OS   Pneumovirinae.
XX
```

PN WO200257302-A2.
XX
PD 25-JUL-2002.
XX
PF 18-JAN-2002; 2002WO-NL000040.
XX
PR 19-JAN-2001; 2001EP-00200213.
PR 18-OCT-2001; 2001EP-00203985.
XX
PA (VIRO-) VIROCLINICS BV.
XX
PI De Jong JC, Fouchier RAM, Van Den Hoogen BG, Osterhaus ADME;
PI Groen J;
XX
DR WPI; 2002-599705/64.
XX
PT New mammalian negative-sense single stranded RNA virus (MPV), useful for
PT producing a pharmaceutical composition for treating or preventing an MPV
PT infection, e.g. respiratory tract illnesses in humans.
XX
PS Disclosure; Page 46; 156pp; English.
XX
CC The invention relates to an isolated mammalian negative-sense single
CC stranded RNA virus (MPV), which belongs to the sub-family Pneumovirinae
CC of the family Paramyxoviridae and is identifiable as phylogenetically
CC corresponding to the genus Metapneumovirus. MPV sequences are useful for
CC the production of a pharmaceutical composition for treating or preventing
CC an MPV infection, particularly respiratory tract illnesses in humans. The
CC sequences are also useful for diagnosing an avian pneumovirus (APV)
CC infection in animals, particularly in mammals or birds. A diagnostic
CC test, which comprises an enzyme immune assay (IEA), is useful for
CC detecting APV specific antibodies for the detection of an antibody
CC directed against MPV. This sequence represents a reverse transcriptase
CC PCR (RT-PCR) primer used for detection of paramyxoviruses
XX
SQ Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 653 ACCTCAGTCTTTCTCGAA 670
||| |||||||||| |||
Db 2 ACCCCAGTCTTTCTTGAA 19

RESULT 93
ABZ87363
ID ABZ87363 standard; DNA; 20 BP.
XX
AC ABZ87363;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 2605; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 5 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 826 TGTGTCTCTTTTCTTCTC 843
||| ||||| |||||||| |
Db 3 TGTATCTCTGTTCTTCTC 20

RESULT 94
ABZ86597/c
ID ABZ86597 standard; DNA; 20 BP.
XX
AC ABZ86597;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1839; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        657 CAGTCTTTCTCGAAGCTT 674
              ||| |||||| |||||||
Db         19 CAGGCTTTCTGGAAGCTT 2
```

RESULT 95
ABZ86534
ID ABZ86534 standard; DNA; 20 BP.
XX
AC ABZ86534;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1776; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        691 CACACTGTACCCTCCAGC 708
              |||||||| ||||| |||
Db          2 CACACTGTCCCCTCGAGC 19
```

RESULT 96
ABZ85870/c
ID ABZ85870 standard; DNA; 20 BP.
XX
AC ABZ85870;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1112; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 8 A; 1 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 526 TTTCCCAACATCCTCTGC 543
||| ||||| ||||||||
Db 19 TTTACCAACTTCCTCTGC 2

RESULT 97
ADE52683/c
ID ADE52683 standard; DNA; 20 BP.
XX
AC ADE52683;
XX
DT 29-JAN-2004 (first entry)
XX
DE dnaform60441 PCR primer, SEQ ID 49.
XX
KW DNA-binding protein; interferon-activatable protein; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO2003089466-A1.
XX
PD 30-OCT-2003.
XX
PF 18-APR-2003; 2003WO-JP004981.
XX
PR 19-APR-2002; 2002JP-00117840.
PR 30-APR-2002; 2002JP-00128418.
PR 30-APR-2002; 2002JP-00128779.
PR 04-DEC-2002; 2002JP-00352469.
XX
PA (RIKE) RIKEN KK.
PA (DNAF-) DNAFORM KK.
PA (MITU) MITSUBISHI CHEM CORP.
XX
PI Hayashizaki Y, Kamiya M, Kubodera H;
XX
DR WPI; 2004-011681/01.
XX
PT Proteins with DNA binding activity and substances that affect their
PT activity or expression, useful for treating associated disorders.
XX
PS Example 6; SEQ ID NO 49; 237pp; Japanese.
XX
CC The present invention relates to novel proteins (ADE52648-ADE52660,
CC ADE52670 and ADE52672) and their coding sequences (ADE52635-ADE52647,
CC ADE52669 and ADE52671). The proteins have a DNA-binding activity or an
CC interferon-activatable protein (IAP)-like activity.
XX
SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 3.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 866 GTTGGAACACTTTCCTGA 883
|||||||| ||||||||
Db 18 GTTGGAACCGTTTCCTGA 1

RESULT 98
AAZ69986
ID AAZ69986 standard; DNA; 21 BP.
XX
AC AAZ69986;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:4342.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 1157; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the

```
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 21 BP; 8 A; 9 C; 0 G; 4 T; 0 U; 0 Other;

  Query Match             3.7%;  Score 14.8;  DB 1;  Length 21;
  Best Local Similarity   88.9%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        513 ACAGTACCAATACTTTCC 530
              |||  ||||||||||||||
Db          4 ACACCACCAATACTTTCC 21


RESULT 99
AAF96342/c
ID   AAF96342 standard; DNA; 21 BP.
XX
AC   AAF96342;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #1103.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,A)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US024503.
XX
PR   10-SEP-1999;   99US-0153357P.
PR   26-JUL-2000; 2000US-0220947P.
PR   16-AUG-2000; 2000US-0225724P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  Mccarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis.
XX
PS   Example; Page 128; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC   pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification
XX
SQ   Sequence 21 BP; 3 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             3.7%;  Score 14.8;  DB 1;  Length 21;
  Best Local Similarity   88.9%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        557 CAGCGAGCTCCTCCCAGA 574
              ||||  |||||||||| ||
Db         18 CAGCCAGCTCCTCCCTGA 1


RESULT 100
ABV90402
ID   ABV90402 standard; DNA; 17 BP.
XX
AC   ABV90402;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1115.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1115; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
```

CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 744 GTAGGGTCCCAGGGTC 759
||||||| |||||||||
Db 2 GTAGGGGCCCAGGGTC 17

RESULT 101
ABV90404
ID ABV90404 standard; DNA; 17 BP.
XX
AC ABV90404;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1117.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 1117; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 745 TAGGGTCCCAGGGTCC 760
||||| ||||||||||
Db 1 TAGGGGCCCAGGGTCC 16

RESULT 102
AAX10202
ID AAX10202 standard; DNA; 19 BP.
XX
AC AAX10202;
XX
DT 24-MAR-1999 (first entry)
XX
DE Human biallelic polymorphic marker downstream primer #508.
XX
KW Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW detection; phenotypic typing; characteristic; infection; hereditary;
KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW treatment; marker; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9820165-A2.
XX
PD 14-MAY-1998.
XX
PF 05-NOV-1997; 97WO-US020313.
XX
PR 06-NOV-1996; 96US-0030455P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Lander ES, Wang D, Hudson T;
XX
DR WPI; 1998-286974/25.
XX
PT New isolated nucleic acid segments from the human genome - used for
PT determining polymorphic forms for use in e.g. forensics, paternity
PT testing or phenotypic typing for disease.
XX
PS Claim 16; Page 213; 310pp; English.
XX
CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC hypercholesterolemia, polycystic kidney disease, hereditary
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC autoimmune diseases, inflammation, cancer, diseases of the nervous
CC system, infection by pathogenic microorganisms, and characteristics such
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,

```
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 19;
  Best Local Similarity   93.8%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        706 AGCGAGTCCCAGGAGA 721
              ||||||||| ||||||
Db          3 AGCGAGTCCAAGGAGA 18


RESULT 103
AAX26537/c
ID   AAX26537 standard; DNA; 20 BP.
XX
AC   AAX26537;
XX
DT   27-MAY-1999  (first entry)
XX
DE   PCR primer P11.
XX
KW   DNA amplification; nucleotide analogue; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO9909213-A1.
XX
PD   25-FEB-1999.
XX
PF   10-AUG-1998;   98WO-JP003566.
XX
PR   14-AUG-1997;   97JP-00231885.
PR   21-OCT-1997;   97JP-00305016.
XX
PA   (TAKI ) TAKARA SHUZO CO LTD.
XX
PI   Yamamoto J,  Mukai H,  Hino F,  Kato I;
XX
DR   WPI; 1999-181059/15.
XX
PT   Simple and accurate method for DNA amplification - uses amplification in
PT   the presence of nucleotide analogues together with a compound which
PT   lowers the Tm of double-stranded nucleic acids.
XX
PS   Example 6; Page 30; 36pp; Japanese.
XX
CC   PCR primers AAX26536-37 were used to exemplify the invention. The
CC   specification describes methods for DNA amplification, wherein a template
CC   DNA containing nucleotide analogues is amplified in the presence of
CC   nucleotide analogues and a substance which lowers the Tm value of double-
CC   stranded nucleic acids. Suitable nucleotide analogues are 7-deaza-dGTP, 7
CC   -deaza-dATP, dITP and hydroxymethyl-dUTP. Suitable Tm value-lowering
CC   substances are formamide, dimethyl sulphoxide and trimethylglycine. The
CC   methods improve the amplification of DNA. Also, DNA fragments which
CC   originated as RNA can be amplified without purifying the RNAs in sample
XX
SQ   Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACCAAG 579
              ||||| ||||||||||
Db         17 CTCCTACCAGACCAAG 2


RESULT 104
AAA41205/c
ID   AAA41205 standard; DNA; 20 BP.
XX
AC   AAA41205;
XX
DT   16-AUG-2000  (first entry)
XX
DE   Human TNFalpha antisense oligonucleotide ISIS# 104852.
XX
KW   Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
KW   tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
KW   rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
KW   pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
KW   inflammatory disease; ss.
XX
OS   Synthetic.
XX
PN   WO200020645-A1.
XX
PD   13-APR-2000.
XX
PF   05-OCT-1999;   99WO-US023205.
XX
PR   05-OCT-1998;   98US-00166186.
PR   18-MAY-1999;   99US-00313932.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Bennett CF,  Butler MM,  Shanahan WJ;
XX
DR   WPI; 2000-303808/26.
XX
PT   Oligonucleotide for treating diseases associated with human tumor
PT   necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
PT   arthritis, comprises nucleotide sequence complementary to intron of
PT   nucleic acid encoding TNF-alpha.
XX
PS   Example 22; Page 106; 283pp; English.
XX
CC   This sequence represents an antisense oligonucleotide sequence which
CC   targets a region of the human tumour necrosis factor alpha (TNFalpha)
CC   nucleotide sequence. TNFalpha is an important cytokine that plays a role
CC   in host defence. It is produced mainly in macrophages and monocytes in
CC   response to infection, invasion, injury or inflammation. Overexpression
CC   of TNFalpha can result in disease states, particularly in infectious,
CC   inflammatory and autoimmune diseases. The invention relates to antisense
CC   oligonucleotides, such as that represented by the present sequence which
CC   are capable of modulating the TNFalpha gene expression. The
CC   oligonucleotides optionally have a phosphorothioate backbone, and may
CC   also optionally contain at least one 2'-O-methoxyethyl modification. The
CC   oligonucleotides are useful for modulating the expression of human
CC   TNFalpha in cells and tissues, reducing a human cell inflammatory
CC   response, reducing the blood glucose level in a human and treating a
CC   human having a disease or condition associated with TNFalpha. Examples of
CC   diseases associated with TNFalpha include diabetes, inflammatory bowel
CC   disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
CC   infectious disease, hepatitis, atopic dermatitis or allograft rejection.
CC   The antisense oligonucleotides are also useful for modulating the
CC   function of a selected nucleic acid sequence in adipose tissue
XX
SQ   Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACCAAG 579
              ||||| ||||||||||
Db         19 CTCCTACCAGACCAAG 4


RESULT 105
AAH48261/c
```

```
ID   AAH48261 standard; DNA; 20 BP.
XX
AC   AAH48261;
XX
DT   21-SEP-2001  (first entry)
XX
DE   Heart muscle cell differentiation related PCR primer SEQ ID NO: 58.
XX
KW   Heart muscle cell; human; cell differentiation; heart disease;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200148151-A1.
XX
PD   05-JUL-2001.
XX
PF   27-DEC-2000; 2000WO-JP009323.
XX
PR   28-DEC-1999;   99JP-00372826.
PR   28-FEB-2000; 2000WO-JP001148.
PR   02-NOV-2000; 2000WO-JP007741.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Umezawa A,  Hata J,  Fukuda K,  Ogawa S,  Sakurada K,  Gojo S;
PI   Yamada Y;
XX
DR   WPI; 2001-425656/45.
XX
PT   Cells capable of differentiating into cardiomyocytes and originating in
PT   bone marrow or umbilical blood cells for study of cardiomyocyte
PT   differentiation and treatment of heart disease.
XX
PS   Example 2; Page 160; 183pp; Japanese.
XX
CC   The present invention provides cells originating in the human bone marrow
CC   or umbilical blood cells which are capable of differentiating into
CC   cardiomyocytes. These cells are useful in the treatment of diseases
CC   involving heart muscle degeneration, such as myocardial infarction, and
CC   the study of cardiomyocyte differentiation. The present sequence is a PCR
CC   primer described in the exemplification of the invention
XX
SQ   Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        597 CTACAACACAGAGTAC 612
              ||||||||||||| |||
Db         19 CTACAACACAGATTAC 4


RESULT 106
AAH49627/c
ID   AAH49627 standard; DNA; 20 BP.
XX
AC   AAH49627;
XX
DT   24-SEP-2001  (first entry)
XX
DE   Myocyte enhancer factor MEF-2D PCR primer #2.
XX
KW   PCR primer; angiogenesis; cardiant; cell differentiating agent;
KW   bone marrow; heart muscle cell; heart disease; MEF-2D;
KW   myocyte enhancer factor; ss.
XX
OS   Synthetic.
XX
PN   WO200148149-A1.
XX
PD   05-JUL-2001.
XX
PF   28-FEB-2000; 2000WO-JP001148.
XX
PR   28-DEC-1999;   99JP-00372826.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Umezawa A,  Hata J,  Fukuda K,  Ogawa S,  Sakurada K;
XX
DR   WPI; 2001-418252/44.
XX
PT   New adult bone marrow-originated cells capable of differentiating into
PT   heart muscle cells, applicable as remedies for various heart diseases
PT   particularly with damaged heart muscle accompanying degeneration.
XX
PS   Example 1; Page 151; 158pp; Japanese.
XX
CC   The present invention relates to cells isolated from bone marrow, which
CC   are capable of at least differentiating into heart muscle cells. The
CC   cells are applicable as remedies for various heart diseases particularly
CC   with damaged heart muscle accompanying degeneration. The present sequence
CC   is a PCR primer, which was used to illustrate the present invention
XX
SQ   Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        597 CTACAACACAGAGTAC 612
              ||||||||||||| |||
Db         19 CTACAACACAGATTAC 4


RESULT 107
AAH44392/c
ID   AAH44392 standard; DNA; 20 BP.
XX
AC   AAH44392;
XX
DT   26-SEP-2001  (first entry)
XX
DE   MEF-2D PCR primer SEQ ID NO:58.
XX
KW   Differentiation; heart muscle cell; cytokine; transcription factor;
KW   proliferation; surface antigen; heart disease; cardiomyocyte;
KW   bone marrow; umbilical blood cell; heart muscle degeneration;
KW   myocardial infarction; PCR primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200148150-A1.
XX
PD   05-JUL-2001.
XX
PF   02-NOV-2000; 2000WO-JP007741.
XX
PR   28-DEC-1999;   99JP-00372826.
PR   28-FEB-2000; 2000WO-JP001148.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Umezawa A,  Hata J,  Fukuda K,  Ogawa S,  Sakurada K,  Gojo S;
PI   Yamada Y;
XX
DR   WPI; 2001-425655/45.
XX
PT   Cells capable of differentiating into cardiomyocytes and originating in
PT   bone marrow or umbilical blood cells for study of cardiomyocyte
PT   differentiation and treatment of heart disease.
XX
PS   Example 2; Page 154; 187pp; Japanese.
```

```
XX
CC   The present invention describes cells originating in bone marrow or
CC   umbilical blood cells which are capable of differentiating into
CC   cardiomyocytes. Also described are: (1) cardiomyocytes produced by the
CC   differentiation of the cells; (2) a method for carrying out the
CC   differentiation into cardiomyocytes, regulated by a promotional and/or
CC   inhibitory factor; (3) a method for the differentiation of the cells into
CC   cell types other than cardiomyocytes; (4) drug compositions promoting the
CC   formation of heart muscle and regeneration of heart tissue which contain
CC   the cells; (5) a method for the production of antibodies which recognise
CC   the cells, especially antibodies which recognise a surface antigen on the
CC   cells; (6) a method for screening factors which promote the proliferation
CC   of the cells; (7) a method for immortalising the cells by expressing
CC   telomerase in them; (8) drug compositions for the treatment of heart
CC   disease which contain the immortalised cells; and (9) cell-free
CC   supernatant from the culture of the cells and its use in promoting their
CC   differentiation into cardiomyocytes. The cells are used in the treatment
CC   of diseases involving heart muscle degeneration, such as myocardial
CC   infarction and in the study of cardiomyocyte differentiation. AAH44351 to
CC   AAH44409 and AAB99915 to AAB99935 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        597 CTACAACACAGAGTAC 612
              ||||||||||||| |||
Db         19 CTACAACACAGATTAC 4


RESULT 108
ABA98527/c
ID   ABA98527 standard; DNA; 20 BP.
XX
AC   ABA98527;
XX
DT   23-APR-2002  (first entry)
XX
DE   Tumour necrosis factor, TNF, PCR primer #2.
XX
KW   PCR Primer; antiinflammatory; Immunomodulator; Cytostatic; Anorectic;
KW   Antibacterial; Immunosuppressive; Antidiabetic; Nephrotropic;
KW   Antiarteriosclerotic; Analgesic; Antiallergic; Dermatological; Cardiant;
KW   Cerebroprotective; Antiparasitic; cytokine; tumour necrosis factor; TNF;
KW   ss.
XX
OS   Synthetic.
XX
PN   US2001053772-A1.
XX
PD   20-DEC-2001.
XX
PF   30-APR-2001; 2001US-00846466.
XX
PR   28-APR-2000; 2000US-0200822P.
XX
PA   (BONA/) BONAVIDA B.
PA   (GANX/) GAN X.
XX
PI   Bonavida B,  Gan X;
XX
DR   WPI; 2002-154103/20.
XX
PT   Use of cytokine immunomodulatory agent comprising a glycerol derivative
PT   in regulating cytokine activity.
XX
PS   Example 6; Page 8; 15pp; English.
XX
CC   The present invention relates to a method for regulating cytokine
CC   activity. The method comprises administering a cytokine immunomodulatory
CC   agent comprising a glycerol derivative. The method is useful for
CC   regulating, affecting or enhancing cytokine activity in a patient having
CC   a condition e.g. inflammatory response, cachexia, a response to an
CC   antigen/a vaccine, adult respiratory distress syndrome, tumour,
CC   neoplasia, infectious diseases, chronic and acute immune diseases,
CC   autoimmunity, transplantation, diseases mediated by nitric oxide and
CC   cytokines, adverse drug reactions, obesity, septic shock, adverse side
CC   effects due to cancer chemotherapy, diabetes, glomerulonephritis, organ
CC   damage, nephrotoxicity, transplant, atherosclerosis, ischaemia-
CC   reperfusion, myocardial infarction, stroke, allergic reactions,
CC   anaphylaxis, arthritis, inflammatory bowel disease, systemic lupus
CC   erythematosus, parasitic mediated immune dysfunctions such as Chagas'
CC   disease, bacterial sepsis and pain. The method enhances the effectiveness
CC   and potency of immunotherapeutic interventions and the response to
CC   vaccines. The present sequence is a PCR primer for the cytokine tumour
CC   necrosis factor (TNF), which was used to illustrate the method
XX
SQ   Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACCAAG 579
              ||||| ||||||||||
Db         17 CTCCTACCAGACCAAG 2


RESULT 109
ABZ92024
ID   ABZ92024 standard; DNA; 20 BP.
XX
AC   ABZ92024;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 7266; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
```

CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 628 CCTGAGAGAGGCTCCT 643
||||||.|||||||||
Db 3 CCTGAGGGAGGCTCCT 18

RESULT 110
ACD26260
ID ACD26260 standard; DNA; 20 BP.
XX
AC ACD26260;
XX
DT 02-SEP-2003 (first entry)
XX
DE Human p53 sequencing primer #2.
XX
KW Human; ss; PCR; primer; sequencing; mutation load; p53; cancer risk;
KW cancer therapy.
XX
OS Homo sapiens.
XX
PN US2003049635-A1.
XX
PD 13-MAR-2003.
XX
PF 08-NOV-2001; 2001US-00986381.
XX
PR 08-NOV-2000; 2000US-0246582P.
XX
PA (CITY) CITY OF HOPE.
XX
PI Sommer SS, Liu Q, Heinmoller E;
XX
DR WPI; 2003-503565/47.
XX
PT Determining mutation load, by identifying a somatic cell that contains
PT accumulated levels of p53, amplifying DNA of the p53 gene from the cell
PT and determining the frequency or nature of mutations in the amplified
PT DNA.
XX
PS Claim 25; Page 10; 14pp; English.
XX
CC The invention relates to a method of determining mutation load, which
CC involves identifying a somatic cell that contains accumulated levels of
CC p53, amplifying DNA of the p53 gene from such cell and determining the
CC frequency or nature of mutations in the amplified DNA. The method is
CC useful for determining mutation load both in subjects who do not yet
CC exhibit signs of disease and subjects who are presently treated using
CC known cancer therapy to assess efficacy of treatment. The method is also
CC useful to identify missense mutations in single cell from normal colon
CC and other tissues. The method is also useful for assessing cancer risk
CC and prognosis and monitoring the effectiveness of cancer therapy and is
CC useful for monitoring the mutational status of individuals over extended
CC periods of time. The present sequence represents the human p53 sequencing
CC primer #2
XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 754 AGGGTCCCTAGGCCTC 769
||||||||.|||||||
Db 1 AGGGTCCCCAGGCCTC 16

RESULT 111
ACD05433/c
ID ACD05433 standard; DNA; 20 BP.
XX
AC ACD05433;
XX
DT 05-AUG-2003 (first entry)
XX
DE Tumour necrosis factor alpha antisense oligonucleotide #436.
XX
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
KW antisense technology; ss.
XX
OS Synthetic.
XX
PN US2003022848-A1.
XX
PD 30-JAN-2003.
XX
PF 02-APR-2001; 2001US-00824322.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
DR WPI; 2003-447433/42.
XX
PT Treating inflammatory disorders such as inflammatory bowel disease,
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
PT oligonucleotide which inhibits expression of human tumor necrosis factor
PT alpha.
XX
PS Example 24; Page 39; 142pp; English.
XX
CC The invention describes a method of treating an inflammatory disorder in
CC an individual, comprising administering to the individual an
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
CC method is useful for treating an inflammatory disorder such as
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
CC arthritis, in an individual. The method is also useful for treating
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
CC and hepatitis in an individual. This sequence represents an antisense
CC oligonucleotide used to modulate expression of tumour necrosis factor
CC alpha (TNF-alpha)
XX
SQ Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

```
  Query Match             3.6%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACCAAG 579
              ||||| ||||||||||
Db         19 CTCCTACCAGACCAAG 4


RESULT 112
AAX23858/c
ID   AAX23858 standard; DNA; 19 BP.
XX
AC   AAX23858;
XX
DT   25-JUN-1999  (first entry)
XX
DE   Acanthamoeba sp. 16S rDNA PCR primer 2.
XX
KW   PCR primer; detection; ocular pathogen; bacteria; fungi; keratitis;
KW   endophthalmitis; gram negative; gram positive; 16S rDNA; ss.
XX
OS   Synthetic.
OS   Acanthamoeba sp.
XX
PN   WO9913104-A1.
XX
PD   18-MAR-1999.
XX
PF   08-SEP-1998;   98WO-GB002705.
XX
PR   08-SEP-1997;   97GB-00019044.
XX
PA   (OPHT-) INST OPHTHALMOLOGY.
XX
PI   Okhravi N,  Lightman S,  Adamson P;
XX
DR   WPI; 1999-229251/19.
XX
PT   Detection of ocular pathogens.
XX
PS   Claim 14; Page 9; 39pp; English.
XX
CC   AAX23830-X23863 are PCR primers used in a novel method of detecting
CC   ocular pathogens by extracting DNA from ocular samples and carrying out 2
CC   amplifications using bacterial, fungal or Acanthamoeba-specific primers.
CC   The method can be used for the detection of pathogens which cause
CC   keratitis or endophthalmitis, especially Candida species, Acanthamoeba
CC   species and gram negative and positive bacteria. The method improves the
CC   sensitivity in the amplification of pathogen DNA from an ocular sample.
CC   The first amplification uses primers having broad specificity for ocular
CC   pathogens, the second uses nested or semi-nested primers to re-amplify
CC   the first step product and to provide genus-specific and in some
CC   instances species-specific information. The further use of restriction
CC   enzymes may provide species-specific information in the majority of cases
XX
SQ   Sequence 19 BP; 3 A; 7 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        549 GGCCTCCCCAGCGAGCTCC 567
              |||||||| | |||||||
Db         19 GGCCTCCCGTGGGAGCTCC 1


RESULT 113
ABL44142
ID   ABL44142 standard; DNA; 19 BP.
XX
AC   ABL44142;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:1186.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 28; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention
XX
SQ   Sequence 19 BP; 6 A; 9 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        689 GCCACACTGTACCCTCCAG 707
              ||||||| ||||||  |||
Db          1 GCCACACAGTACCCCACAG 19


RESULT 114
AAQ14871
ID   AAQ14871 standard; DNA; 20 BP.
XX
AC   AAQ14871;
XX
DT   20-FEB-1992  (first entry)
XX
DE   Oligonucleotide #13 hybridisable to 5-lipoxygenase coding sequence.
XX
KW   arachidonic acid; antisense oligonucleotide; rheumatoid arthritis;
KW   osteoarthritis; lupus; anaphylaxis; urticaria; asthma; psoriasis;
KW   hepatitis; cerebral oedema; contact dermatitis; ulcerative colitis;
```

KW phosphorothioate linkage; ss.
XX
OS Synthetic.
XX
PN WO9116901-A.
XX
PD 14-NOV-1991.
XX
PF 30-APR-1990; 90US-00516969.
XX
PR 30-APR-1990; 90US-00516969.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Ecker DJ, Crooke ST, Mirabelli CK;
XX
DR WPI; 1991-353508/48.
XX
PT Oligo-nucleotide analogues which modulate arachidonic acid metabolism -
PT for treatment and diagnosis of conditions caused by lipoxygenase,
PT phospholipase, leukotriene(s) etc.
XX
PS Claim 18; Page 53; 87pp; English.
XX
CC This oligonucleotide hybridises to the 3'-untranslated region of the 5-
CC lipoxygenase mRNA. The phosphorothioate analogue of this oligonucleotide
CC inhibits 5-lipoxygenase activity in rat basophilic leukaemia cells. See
CC AAQ14859-Q14895
XX
SQ Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 550 GCCTCCCCAGCGAGCTCCT 568
|||| ||||| ||||| ||
Db 1 GCCTGCCCAGAGAGCTGCT 19

RESULT 115
AAQ53125/c
ID AAQ53125 standard; DNA; 20 BP.
XX
AC AAQ53125;
XX
DT 03-JUN-1994 (first entry)
XX
DE Gene detection sequence 49.
XX
KW Gene detection; radio-isotopes; target gene; electrode; detection;
KW optical fibre; hybridise; hybridisation; electrochemical; photochemical;
KW electrolysis; probe; ss.
XX
OS Synthetic.
XX
PN JP05285000-A.
XX
PD 02-NOV-1993.
XX
PF 10-SEP-1992; 92JP-00242397.
XX
PR 13-FEB-1992; 92JP-00025621.
XX
PA (TOKE) TOSHIBA KK.
XX
DR WPI; 1993-382240/48.
XX
PT Detection method of gene without using radio-isotope - by hybridisation
PT of nucleic acid probe which is single strand having complementary
PT sequence of gene and single strand denatured sample DNA.
XX
PS Disclosure; Page 23; 26pp; Japanese.
XX
CC The sequences (AAQ53077-Q53136) are used in the invention to detect
CC specific genes without the use of radio-isotopes. Detection is carried
CC out by hybridisation of denatured (ss) sample DNA with a (ss) nucleic
CC acid probe, complementary to the target sequence. Hybridisation occurs on
CC the surface of an electrode or optical fibre and detection is visualised
CC by the addition of an entity that recognises (ds) hybridised DNA and is
CC electrochemically / photochemically active
XX
SQ Sequence 20 BP; 3 A; 1 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 530 CCAACATCCTCTGCTCCTA 548
|||||| | |||||||| |
Db 20 CCAACACCATCTGCTCCAA 2

RESULT 116
AAV26597/c
ID AAV26597 standard; DNA; 20 BP.
XX
AC AAV26597;
XX
DT 28-AUG-1998 (first entry)
XX
DE IBDV segment A antisense strand PCR primer A5-IP23.
XX
KW Plasmid pUC19FLAD78; IBDV; Gumboro disease; vaccine;
KW synthetic RNA transcript; reverse genetics; PCR; primer; ss.
XX
OS Synthetic.
OS Infectious bursal disease virus.
XX
PN WO9809646-A1.
XX
PD 12-MAR-1998.
XX
PF 31-JUL-1997; 97WO-US012955.
XX
PR 05-SEP-1996; 96US-00708541.
XX
PA (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
XX
PI Vakharia VN, Mundt E;
XX
DR WPI; 1998-193322/17.
XX
PT Generation of live birna:virus from synthetic RNA transcripts - useful
PT for vaccines against infectious bursal disease.
XX
PS Example 1; Page 18; 84pp; English.
XX
CC 2 Primer pairs, A5'-23, A5-IP23 and A3'-23, A3-IP23 (see AAV26596-99),
CC were used for RT-PCR amplification of segment A RNA of infectious bursal
CC disease virus (IBDV) strain 23/82. Antisense strand primer A5-IP23
CC corresponds to nucleotides 1971-1990 of a published sequence of IBDV P2
CC strain. The 2 PCR products were separately cloned into a pUC18 vector,
CC and used to construct plasmid pUC18FLA23 (see AAV26606). This construct
CC contains a full-length cDNA copy of segment A encoding polyprotein VP2-
CC VP4-VP3 (see AAW54377) and protein VP5 (see AAW54376). It can be used in
CC a reverse genetics system for generating infectious IBDV from synthetic
CC RNA transcripts that will facilitate the design of a new generation of
CC live and inactivated vaccines
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        602 ACACAGAGTACTGACTCTG 620
              | || |||||||| |||||
Db         19 AGACGGAGTACTGCCTCTG 1
```

RESULT 117
AAV20061
ID AAV20061 standard; DNA; 20 BP.
XX
AC AAV20061;
XX
DT 06-JUL-1998 (first entry)
XX
DE N-ras probe 683C.
XX
KW Probe; N-ras; mutation detection; mismatch binding protein;
KW cancer diagnosis; single strand binding protein; ss.
XX
OS Synthetic.
XX
PN WO9745555-A1.
XX
PD 04-DEC-1997.
XX
PF 22-MAY-1997; 97WO-SE000839.
XX
PR 29-MAY-1996; 96SE-00002062.
XX
PA (PHAA) PHARMACIA BIOTECH AB.
XX
PI Hasebe M, Goto M, Tosu M;
XX
DR WPI; 1998-130209/12.
XX
PT Method for detecting mutation(s) by mismatch binding protein - useful for
PT separating mutation from non-mutated target polynucleotide in sample,
PT used in early diagnosis of cancer.
XX
PS Example 1; Page 9; 24pp; English.
XX
CC This sequence represents a probe for the N-ras gene, that can be used in
CC the method of the invention. The method is for for detecting a mutation
CC from a non-mutated sequence of a target polynucleotide (TP) in a sample,
CC by using a mismatch binding protein (MBP), comprises: (a) providing a non
CC -mutated and mutated TP; (b) forming duplex of the non-mutated and
CC mutated single strands of TP in (a); (c) adding a single strand binding
CC protein to the polynucleotide from (b); (d) incubating MBP with an
CC activating agent; (e) adding the incubated MBP from (d) to the
CC polynucleotide from (c), so that MBP binds to the duplex formed by one
CC non-mutated and one mutated single strand of TP; and (f) detecting the
CC presence of any MBP bound to TP. The method may be used for early
CC diagnosis of cancer. Binding of MBP to single strands is inhibited by the
CC single strand binding protein. By activating MBP with an activator,
CC before addition to the sample, binding to double strands lacking
CC mismatches does not take place
XX
SQ Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        530 CCAACATCCTCTGCTCCTA 548
              |||||| | |||||||| |
Db          1 CCAACACCATCTGCTCCAA 19
```

RESULT 118
AAX25676/c
ID AAX25676 standard; DNA; 20 BP.
XX
AC AAX25676;
XX
DT 21-MAY-1999 (first entry)
XX
DE Human endogenous retrovirus W primer POL5145.
XX
KW Clone; human endogenous retrovirus; genome; autoimmune disease; primer;
KW multiple sclerosis; rheumatoid polyarthritis; insulin-dependent diabetes;
KW disseminated lupus erythematosus; pregnancy; chromosomal marker; PCR;
KW amplification; ss.
XX
OS Synthetic.
OS Human endogenous retrovirus.
XX
PN WO9902696-A1.
XX
PD 21-JAN-1999.
XX
PF 06-JUL-1998; 98WO-FR001442.
XX
PR 07-JUL-1997; 97FR-00008815.
XX
PA (INMR) BIO MERIEUX.
XX
PI Beseme F, Blond J, Bouton O, Mandrand B, Mallet F;
XX
DR WPI; 1999-120897/10.
XX
PT New nucleic acid sequences from human endogenous retrovirus-W - expressed
PT exclusively in placenta and useful in diagnosis and therapy of autoimmune
PT disease, and abnormal or failed pregnancy.
XX
PS Example 5; Page 87; 106pp; French.
XX
CC This sequence represents a primer used to analyse the human endogenous
CC retrovirus (HERV) W genome (AAX25665). Nucleic acids, their fragments or
CC peptides encoded by them derived from the HERV-W genome are markers of
CC autoimmune disease (e.g. multiple sclerosis, rheumatoid polyarthritis,
CC disseminated lupus erythematosus, insulin-dependent diabetes and related
CC pathologies) and of abnormal or unsuccessful pregnancy and can be used as
CC chromosomal markers for susceptibility to these conditions, or proximity
CC markers of genes associated with this susceptibility
XX
SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        734 ATAGGACTTGGTAGGGTCC 752
              | | |||| ||||||||||
Db         19 AAATGACTGGGTAGGGTCC 1
```

RESULT 119
AAV73129/c
ID AAV73129 standard; DNA; 20 BP.
XX
AC AAV73129;
XX
DT 09-FEB-1999 (first entry)
XX
DE Human ras oncogene mutant detecting oligomer N-13 p1.
XX
KW Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS Synthetic.
XX
PN US5847095-A.
XX
PD 08-DEC-1998.
XX
PF 03-JAN-1997; 97US-00778543.
XX
PR 23-JUL-1985; 85US-00758104.

```
PR   04-AUG-1987;   87US-00081490.
PR   21-APR-1992;   92US-00873352.
PR   23-JUN-1994;   94US-00264425.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Bos JL,  Van Der Eb AJ;
XX
DR   WPI; 1999-059149/05.
XX
PT   Probes for detecting ras oncogene point mutations - useful for the
PT   diagnosis of cancer associated with single base mutations.
XX
PS   Disclosure; Col 19-20; 18pp; English.
XX
CC   AAV73084-V73145 are oligomers used in a method to detect a single-base
CC   mutation in a human ras oncogene. These probes comprise 12-43 nucleotides
CC   of formula 5'-B-Q-D-3', Q = 3 nucleotides complementary to the mutated
CC   codon, and B and D each = 0-20 nucleotides complementary to the ras
CC   sequences flanking the mutated codon. The probes are useful for detecting
CC   cancers associated with point mutations
XX
SQ   Sequence 20 BP; 4 A; 1 C; 10 G; 4 T; 0 U; 1 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   80.0%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy        527 TTCCCAACATCCTCTGCTCC 546
              ||||||||   |||||||
Db         20 TTCCCAACACNACCTGCTCC 1


RESULT 120
AAA93137
ID   AAA93137 standard; DNA; 20 BP.
XX
AC   AAA93137;
XX
DT   12-JAN-2001  (first entry)
XX
DE   Clone vc65_1 secreted protein coding sequence probe SEQ ID NO: 68.
XX
KW   Human secreted protein; cytokine; cell proliferation;
KW   nutritional supplement; immune modulation; autoimmune disorder;
KW   haematopoiesis regulation; tissue growth; haemostasis; inflammation;
KW   probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200049134-A1.
XX
PD   24-AUG-2000.
XX
PF   18-FEB-2000; 2000WO-US004340.
XX
PR   19-FEB-1999;   99US-0120680P.
PR   23-APR-1999;   99US-00298733.
PR   17-AUG-1999;   99US-0149639P.
PR   23-SEP-1999;   99US-0155686P.
PR   01-OCT-1999;   99US-0157247P.
PR   29-NOV-1999;   99US-0167822P.
PR   29-NOV-1999;   99US-0167823P.
PR   15-FEB-2000;  2000US-0182711P.
XX
PA   (ALPH-) ALPHAGENE INC.
XX
PI   Valenzuela D,  Yuan O,  Hoffman H,  Hall J,  Rapiejko P;
XX
DR   WPI; 2000-549267/50.
XX
PT   New secreted proteins and polynucleotides encoding them, which are
PT   derived from Homosapiens, useful for therapy, diagnosis, and research, as
PT   well as nutritional sources or supplements.
XX
PS   Disclosure; Page 291; 309pp; English.
XX
CC   The present invention is concerned with a number of secreted proteins and
CC   their coding sequences isolated from various human cDNA libraries. The
CC   probes shown in the specification (AAA93132-A93156) can be used to obtain
CC   the cloned sequences from bacterial cells. The proteins and coding
CC   sequences can be used in the isolation of similar genes and proteins, in
CC   the elucidation of their function in vivo, and to treat a number of
CC   conditions. It is possible that they may have uses as nutritional
CC   supplements, as cytokine or cell proliferation factors, in immune
CC   modulation, where they may be used to treat immune and autoimmune
CC   diseases, as haematopoiesis regulators (treating myeloid or lymphoid cell
CC   deficiencies), in the promotion of tissue growth, they may have chemokine
CC   or chemotactic activity, haemostatic or thrombolytic activity, or anti-
CC   inflammatory activity
XX
SQ   Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        803 CTCTCCTCCAACTCAGGGT 821
              |||  |||||  ||||||||
Db          2 CTCAGCTCCATCTCAGGGT 20


RESULT 121
AAK95036/c
ID   AAK95036 standard; DNA; 20 BP.
XX
AC   AAK95036;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human cDNA clone-specific primer, SEQ ID NO: 4281.
XX
KW   Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1130094-A2.
XX
PD   05-SEP-2001.
XX
PF   07-JUL-2000; 2000EP-00114089.
XX
PR   08-JUL-1999;   99JP-00194486.
PR   11-JAN-2000;  2000JP-00118774.
PR   02-MAY-2000;  2000JP-00183765.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Nishikawa T,  Isogai T,  Hayashi K,  Ishii S,  Kawai Y;
PI   Wakamatsu A,  Sugiyama T,  Nagai K,  Kojima S,  Otsuki T,  Koga H;
XX
DR   WPI; 2001-524255/58.
XX
PT   830 Primers useful for synthesizing full length cDNA clones and their use
PT   in genetic manipulation.
XX
PS   Example 18; Page 129; 1380pp + Sequence Listing; English.
XX
CC   The invention relates to primers for synthesising full length cDNA
CC   clones. 830 cDNA molecules encoding a human protein have been isolated
CC   and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
CC   been determined. Primers for synthesising the full length cDNA are useful
CC   for clarifying the function of the protein encoded by the cDNA. The full
CC   length clones were obtained by construction of full length enriched cDNA
CC   libraries that were synthesised by the oligo-capping method. The primers
CC   enable the production of the full length cDNA easily without any special
```

```
CC   methods. The present sequence is a primer used to amplify a human cDNA
CC   clone provided in the invention
XX
SQ   Sequence 20 BP; 11 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTCTTCTC 843
              || |||||| ||||||| |
Db         19 CTTTGTCTCATTTCTTCCC 1


RESULT 122
AAS06996
ID   AAS06996 standard; DNA; 20 BP.
XX
AC   AAS06996;
XX
DT   26-SEP-2001  (first entry)
XX
DE   Primer BETH-R used to sequence transposon mutant GPM207.
XX
KW   Transposon mutant GPM207; Tn5367; bacterial virulence determinant;
KW   non-virulent bacteria; mycobacterial infection; immune response;
KW   paratuberculosis; Johne's disease; mutant; primer; ss.
XX
OS   Mycobacterium smegmatis.
OS   Mycobacterium avium subsp. paratuberculosis; strain K-10.
OS   Synthetic.
OS   Chimeric.
XX
PN   WO200151649-A2.
XX
PD   19-JUL-2001.
XX
PF   11-JAN-2001; 2001WO-US000980.
XX
PR   11-JAN-2000; 2000US-0175433P.
XX
PA   (UYNE-) UNIV NEBRASKA.
XX
PI   Barletta RG,  Harris NB;
XX
DR   WPI; 2001-442153/47.
XX
PT   Identifying bacterial virulence determinants, involves mutating bacterial
PT   genome, culturing mutant with antimicrobial agent, selecting live non-
PT   virulent bacteria, determining mutation site, comparing with wild type.
XX
PS   Example 3; Page 19; 36pp; English.
XX
CC   The present sequence for primer BETH-R is used to sequence transposon-
CC   chromosomal junction of transposon mutant GPM207. The transposon mutant
CC   GPM207 comprises Mycobacterium paratuberculosis chromosomal DNA and
CC   transposon Tn5367 derived from M. smegmatis. The present sequence is
CC   described in an invention relating to methods of identifying virulence
CC   determinants in bacteria, particularly of the genus Mycobacterium. The
CC   method comprises introducing a mutation into bacterial genome, culturing
CC   mutated bacteria in the presence of an antimicrobial agent that kills
CC   only growing bacteria, testing surviving bacteria for virulence,
CC   sequencing genetic material from non-virulent bacteria, determining the
CC   mutation site, and comparing the sequence at mutated and corresponding
CC   wild type sites. The present method is useful for identifying virulence
CC   determinants in bacteria such as M. paratuberculosis e.g. for diagnosing
CC   mycobacterial infection. A composition for immunising an animal against
CC   bacterial infection comprising at least one non-virulent strain of
CC   bacteria produced by the present method or at least one bacterial
CC   virulence determinant identified by the present method is useful for
CC   inducing an immune response in an animal against paratuberculosis
CC   (Johne's disease). The method is useful to create strains of mycobacteria
CC   which are non-virulent or have reduced virulence
XX
SQ   Sequence 20 BP; 3 A; 11 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        684 CCAGGGCCACACTGTACCC 702
              ||||| |||||||  |||
Db          2 CCAGGTCCACACTGCCCCC 20


RESULT 123
AAD40838
ID   AAD40838 standard; DNA; 20 BP.
XX
AC   AAD40838;
XX
DT   30-OCT-2002  (first entry)
XX
DE   Human hepsin antisense oligonucleotide, ISIS 107112.
XX
KW   Human; hepsin; antisense compound; antisense therapy; antisense;
KW   phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   17
FT                   /*tag=  i
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  j
FT                   /mod_base= m5c
XX
PN   WO200250247-A2.
XX
PD   27-JUN-2002.
XX
PF   14-DEC-2001; 2001WO-US048341.
XX
PR   20-DEC-2000; 2000US-00742482.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
```

```
PI   Cowsert LM;
XX
DR   WPI; 2002-519882/55.
XX
PT   Novel antisense compound targeted to nucleic acids encoding human hepsin,
PT   useful for inhibiting the expression of hepsin in human cells or tissues,
PT   and for treating humans having a disease associated with human hepsin.
XX
PS   Claim 3; Page 94; 100pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating the expression of hepsin. The compositions comprise
CC   antisense compounds, particularly antisense oligonucleotides, targetted
CC   to nucleic acids encoding hepsin. The antisense compound is useful for
CC   inhibiting the expression of hepsin in human cells or tissues. It is also
CC   useful for treating an animal having a disease or condition associated
CC   with hepsin, by inhibiting expression of hepsin. It is useful for
CC   diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC   It is also used in antisense therapy. The present sequence is an
CC   antisense oligonucleotide targetted to human hepsin DNA. This sequence is
CC   used in the exemplification of the invention
XX
SQ   Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        674 TGGCGGACCCCCAGGGCCA 692
              |||| |||| || ||||||
Db          1 TGGCTGACCTCCTGGGCCA 19


RESULT 124
ABL59021/c
ID   ABL59021 standard; DNA; 20 BP.
XX
AC   ABL59021;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Nucleotide sequence of a human aurora 2 kinase inhibitor sas07.
XX
KW   Aurora 2 kinase; aurora 2 kinase inhibitor; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2002095479-A.
XX
PD   02-APR-2002.
XX
PF   22-SEP-2000; 2000JP-00287928.
XX
PR   22-SEP-2000; 2000JP-00287928.
XX
PA   (TANB ) TT PHARM INC.
XX
DR   WPI; 2002-439988/47.
XX
PT   New oligonucleotide targets and inhibits human aurora 2 kinase mRNA.
XX
PS   Disclosure; Fig 1; 12pp; Japanese.
XX
CC   The present sequence represents an oligonucleotide which targets
CC   polynucleotides encoding human aurora 2 kinase. The oligonucleotide
CC   inhibits aurora 2 kinase expression. The oligonucleotide is useful in the
CC   diagnosis and treatment of cancers
XX
SQ   Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        860 GCTCCAGTTGGAACACTTT 878
              || ||| |||||||| |||
Db         20 GCACCACTTGGAACAGTTT 2


RESULT 125
AAD40656
ID   AAD40656 standard; DNA; 20 BP.
XX
AC   AAD40656;
XX
DT   30-OCT-2002  (first entry)
XX
DE   Human hepsin antisense oligonucleotide, ISIS 107112.
XX
KW   Human; antisense; hepsin; inflammation; tumour; gene therapy; cytostatic;
KW   phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   17
FT                   /*tag=  i
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  j
FT                   /mod_base= m5c
XX
PN   WO200250248-A2.
XX
PD   27-JUN-2002.
XX
PF   14-DEC-2001; 2001WO-US048431.
XX
PR   20-DEC-2000; 2000US-00742703.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (ABBO ) ABBOTT LAB.
XX
PI   Marcotte PA,  Cowsert LM;
XX
DR   WPI; 2002-519883/55.
XX
PT   New antisense oligonucleotides that modulate (particularly inhibit) human
```

PT hepsin, useful for treating a disease or condition associated with the
PT expression of hepsin, e.g. inflammation or tumor growth.
XX
PS Example 15; Page 82; 101pp; English.
XX
CC The invention relates to an antisense compound 8-30 nucleobases in length
CC targetted to a nucleic acid molecule encoding human hepsin. The antisense
CC compound specifically hybridises with and inhibits the expression of
CC human hepsin. The antisense compound or the pharmaceutical composition is
CC useful for treating animals and humans having a disease or condition
CC associated with the expression of hepsin, e.g. inflammation or tumour
CC growth. The antisense compounds are useful also for diagnostics,
CC prophylaxis (e.g. to prevent or delay infection, inflammation or tumour
CC formation) or as research reagents and kits. The method is useful for
CC modulating, specifically inhibiting the expression of hepsin which may be
CC used in research, e.g to distinguish between functions of various members
CC of a biological pathway. The invention is used in gene therapy. The
CC present sequence is human hepsin antisense oligonucleotide
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 674 TGGCGGACCCCCAGGGCCA 692
|||| |||| || ||||||
Db 1 TGGCTGACCTCCTGGGCCA 19

RESULT 126
ABZ90449
ID ABZ90449 standard; DNA; 20 BP.
XX
AC ABZ90449;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 5691; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 3.6%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 769 CCACTTCTGAGGGCAGCCC 787
|| || |||||| ||||||
Db 2 CCCCTACTGAGGCCAGCCC 20

RESULT 127
ABZ88558
ID ABZ88558 standard; DNA; 20 BP.
XX
AC ABZ88558;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 3800; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the

```
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        641 CCTAAGTCACAGACCTCAG 659
              ||||||||||  ||  ||||
Db          2 CCTAAGTCACTGAAATCAG 20


RESULT 128
ACC47947
ID   ACC47947 standard; DNA; 20 BP.
XX
AC   ACC47947;
XX
DT   11-AUG-2003  (first entry)
XX
DE   Fusion mGM-CSF/mIL2 DNA sequencing primer P1.
XX
KW   Immunotherapy; cytokine; chemokine; interferon; tumour growth; vaccine;
KW   gene therapy; cancer; cytostatic; virucide; immunostimulant;
KW   antibacterial; protozoacide; GM-CSF; IL2; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003035105-A2.
XX
PD   01-MAY-2003.
XX
PF   23-OCT-2002; 2002WO-CA001649.
XX
PR   23-OCT-2001; 2001US-0330476P.
XX
PA   (TRAN-) CENT TRANSLATIONAL RES IN CANCER.
XX
PI   Galipeau J,  Stagg J;
XX
DR   WPI; 2003-421370/39.
XX
PT   New immunotherapy conjugate, useful for reducing tumor growth, for
PT   inhibiting viral infection, for improving immune response, and as vaccine
PT   against infectious organisms, e.g. viruses, bacteria, mycobacteria,
PT   protozoa and prions.
XX
PS   Disclosure; Page 10; 27pp; English.
XX
CC   The invention relates to an immunotherapy conjugate comprising the
CC   formula A-c-B, where A and B = are different and are compounds selected
CC   from the cytokines, chemokines, interferons, their respective receptors
CC   or a functional fragments; and C = a linker consisting of a bond or an
CC   amino acid sequence containing 1-100 residues. The conjugate and the
CC   fusion cDNA are useful for reducing tumour growth, for inhibiting viral
CC   infection, and for improving immune response in a patient. The vaccine
CC   adjuvant is useful against an infectious organism such as viruses,
CC   bacteria, mycobacteria, protozoa and prions, and against malignancies
CC   having at least one immunogen associated to it. The virus may be an
CC   influenza virus, hepatitis A virus, HBV, HCV, HIV, yellow fever virus,
CC   Aphthovirus or Filovirus. Normal autologous patient-derived cells
CC   engineered ex vivo to integrate and express the fusion cDNA are also
CC   useful for reducing tumor growth in a patient. The species-specific
CC   fusion cDNA in combination with the cDNA of antigen or its functional
CC   fragment can be used in the production of antigen-specific antibodies in
CC   mammals. The conjugate is further useful for genesis of cell and gene
CC   therapy, biopharmaceuticals for treating cancer, and as a genetic
CC   immunoadjuvant for the production of commercially valuable monoclonal and
CC   polyclonal antibodies in mammals. Sequences ACC47947-48 represent primers
CC   for sequencing the fusion mGM-CSF/mIL2 DNA coding sequence within pJS330
XX
SQ   Sequence 20 BP; 7 A; 8 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match             3.6%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        557 CAGCGAGCTCCTCCCAGAC 575
              |||| |||| || ||||||
Db          2 CAGCCAGCTACTACCAGAC 20


RESULT 129
ACC51502
ID   ACC51502 standard; DNA; 17 BP.
XX
AC   ACC51502;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #269.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 102; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 5 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
```

```
  Query Match             3.5%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        647 TCACAGACCTCAGT 660
              ||||||||||||||
Db          3 TCACAGACCTCAGT 16


RESULT 130
ADC22272
ID   ADC22272 standard; DNA; 18 BP.
XX
AC   ADC22272;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Protein binding domain nucleotide sequence SEQ ID NO:121.
XX
KW   recombinant fusion protein; fusion protein; binding; detection;
KW   localisation domain; binding domain;
KW   subcellular compartment localisation; gene; ds.
XX
OS   Synthetic.
XX
PN   WO2003012068-A2.
XX
PD   13-FEB-2003.
XX
PF   01-AUG-2002; 2002WO-US024572.
XX
PR   01-AUG-2001; 2001US-0309395P.
PR   13-DEC-2001; 2001US-0341589P.
XX
PA   (CELL-) CELLOMICS INC.
XX
PI   Bright G,  Premkumar DR,  Chen Y;
XX
DR   WPI; 2003-248174/24.
DR   P-PSDB; ADC22271.
XX
PT   New recombinant fusion protein comprising detection and first
PT   localization domains and a binding domain for the molecule of interest,
PT   useful for detecting binding of a molecule of interest.
XX
PS   Disclosure; SEQ ID NO 121; 101pp; English.
XX
CC   The present invention describes a recombinant fusion protein (I) for
CC   detecting binding of a molecule of interest. (I) comprises: (a) a
CC   detection domain; (b) a first localisation domain; and (c) a binding
CC   domain for the molecule of interest. The detection domain, the first
CC   localisation domain and the binding domain for the molecule of interest
CC   constituting the recombinant fusion protein for detecting binding of a
CC   molecule of interest are operably linked. The binding domain for the
CC   molecule of interest is separated from the first localisation domain by 0
CC   -20 amino acid residues. The first localisation domain and the binding
CC   domain for the molecule of interest both do not occur in a single non-
CC   recombinant protein with the same spacing as in the recombinant fusion
CC   protein for detecting binding of a molecule of interest. Also described:
CC   (1) a recombinant nucleic acid encoding the recombinant fusion protein;
CC   (2) a recombinant expression vector comprising the nucleic acid control
CC   sequences operably linked to the recombinant nucleic acid molecule; (3) a
CC   genetically engineered host cell transfected with the recombinant
CC   expression vector; (4) a kit for detecting binding of the molecule of
CC   interest; and (5) a method for identifying compounds that alter the
CC   binding of the molecule of interest. The recombinant fusion protein is
CC   useful for detecting binding of a molecule of interest. The recombinant
CC   fusion protein eliminates the need to construct two or more chimeric
CC   proteins and enables the monitoring of biochemical events in live, intact
CC   or fixed cells. The present sequence is used in the exemplification of
CC   the present invention.
XX
SQ   Sequence 18 BP; 2 A; 7 C; 0 G; 3 T; 0 U; 6 Other;

  Query Match             3.5%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   61.1%;  Pred. No. 1.3e+02;
  Matches   11;  Conservative    6;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        560 CGAGCTCCTCCCAGACCA 577
              :::: |||||||::||||
Db          1 MSWSTTCCTCCCWKACCA 18


RESULT 131
AAT80030/c
ID   AAT80030 standard; cDNA; 20 BP.
XX
AC   AAT80030;
XX
DT   29-OCT-1997  (first entry)
XX
DE   Alpha1 integrin primer #1.
XX
KW   PCR; polymerase chain reaction; primer; amplify; alpha1 integrin;
KW   alpha2 integrin; glomerulopathy; diabetes; nephropathy; ss.
XX
OS   Synthetic.
XX
PN   WO9704133-A1.
XX
PD   06-FEB-1997.
XX
PF   19-JUL-1996;   96WO-US012067.
XX
PR   21-JUL-1995;   95US-0001387P.
PR   03-AUG-1995;   95US-0001861P.
PR   02-MAY-1996;   96US-0016700P.
XX
PA   (MINU ) UNIV MINNESOTA.
XX
PI   Tsilibary P,  Charonis AS,  Setty S,  Mauer M;
XX
DR   WPI; 1997-132668/12.
XX
PT   Detection of nephropathy in mammals - by comparing integrin subunit
PT   expression in a tissue sample compared to a control tissue sample.
XX
PS   Example 6; Page 35; 73pp; English.
XX
CC   AAT80030-T80035 represent amplification primers for the alpha1 integrin
CC   coding sequence. The primers represented in AAT80036-T80041 are used for
CC   the amplification of the alpha2 integrin coding sequence. These sequences
CC   can be used in the method of the invention. The method of the invention
CC   is for the identification of a mammal having, or at risk of developing,
CC   glomerulopathy. The method comprises analysing a tissue sample from a
CC   mammal known to contain cells expressing integrin RNA or protein for
CC   integrin subunit expression. The integrin subunit expression in the
CC   sample is then compared with a control tissue sample, where altered
CC   integrin subunit expression is correlated with glomerulopathy. The method
CC   can be modified to identify a mammal with diabetes who has, or is at risk
CC   of developing, secondary pathological changes associated with diabetes.
CC   An increase in alpha2,3,5 or beta-1 integrin expression and/or a decrease
CC   in alpha1 expression is diagnostic of increased risk of nephropathy. The
CC   methods can be used to determine if patients are likely to develop severe
CC   nephropathy and to monitor progress of disease during treatment protocols
XX
SQ   Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        718 GAGAGTGACTCTGG 731
              ||||||||||||||
Db         14 GAGAGTGACTCTGG 1
```

```
RESULT 132
ADA06103
ID   ADA06103 standard; DNA; 20 BP.
XX
AC   ADA06103;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human fatty acid-CoA ligase-like enzyme reverse PCR primer SEQ ID NO:7.
XX
KW   human; fatty acid-CoA ligase-like enzyme; anorectic; antidepressant;
KW   immunomodulator; antidiabetic; cardiant; vasotropic; antianginal;
KW   antiarrhythmic; hypotensive; thrombolytic; cytostatic; gene therapy;
KW   obesity; anorexia; cachexia; wasting disorder; diabetes;
KW   cardiovascular disorder; congestive heart failure; myocardial infarction;
KW   ischaemic disease; angina; asymptomatic ischaemia; atrial arrhythmia;
KW   ventricular arrhythmia; hypertensive vascular disease;
KW   peripheral vascular disease; acute arterial thrombosis; embolism; cancer;
KW   PCR primer; ss; enzyme.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003027292-A2.
XX
PD   03-APR-2003.
XX
PF   18-APR-2002; 2002WO-EP004282.
XX
PR   18-APR-2001; 2001US-0284183P.
PR   01-JUN-2001; 2001US-0294576P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Xiao Y;
XX
DR   WPI; 2003-402980/38.
XX
PT   New polynucleotide encoding human fatty acid-CoA ligase-like enzyme
PT   polypeptide, useful in preventing, ameliorating or treating diseases
PT   associated with fatty acid-CoA ligase-like enzyme dysfunction, e.g.
PT   obesity or cancer.
XX
PS   Example 6; Page 64; 119pp; English.
XX
CC   The present invention describes human fatty acid-CoA ligase-like enzyme
CC   (I). (I) has anorectic, antidepressant, immunomodulator, antidiabetic,
CC   cardiant, vasotropic, antianginal, antiarrhythmic, hypotensive,
CC   thrombolytic and cytostatic activities, and can be used in gene therapy.
CC   The human fatty acid-CoA ligase-like enzyme protein and polynucleotide
CC   are useful in preventing, ameliorating or treating diseases associated
CC   with human fatty acid-CoA ligase-like enzyme dysfunction such as obesity,
CC   anorexia, cachexia, wasting disorders, diabetes, cardiovascular disorder
CC   (e.g. congestive heart failure, myocardial infarction, ischaemic diseases
CC   of the heart including angina and asymptomatic ischaemia, atrial and
CC   ventricular arrhythmias, hypertensive vascular diseases, or peripheral
CC   vascular diseases including acute arterial thrombosis and embolism), or
CC   cancer. The human fatty acid-CoA ligase-like enzyme protein can also be
CC   used in genetic testing, or diagnostic assays for detecting diseases and
CC   abnormalities or susceptibility to diseases and abnormalities related to
CC   the presence of mutations in the nucleic acid sequences that encode the
CC   enzyme. The present sequence represents a PCR primer for (I), which is
CC   used in an example from the present invention.
XX
SQ   Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        664 TCTCGAAGCTTGGC 677
              ||||||||||||||
Db          2 TCTCGAAGCTTGGC 15


RESULT 133
AAT53433
ID   AAT53433 standard; RNA; 17 BP.
XX
AC   AAT53433;
XX
DT   25-MAR-2003  (revised)
DT   27-MAR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 31).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
```

```
PS   Claim 2; Page 201; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 17 BP; 0 A; 8 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 1.3e+02;
  Matches   10;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        537 CCTCTGCTCCTAGGCCT 553
              ||:|:||:||: | ||:
Db          1 CCUCUGCUCCUGGUCCU 17


RESULT 134
AAT53447
ID   AAT53447 standard; RNA; 17 BP.
XX
AC   AAT53447;
XX
DT   25-MAR-2003  (revised)
DT   27-MAR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 96).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 201; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 17 BP; 0 A; 8 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 1.3e+02;
  Matches   10;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        537 CCTCTGCTCCTAGGCCT 553
              ||:|:||:||: | ||:
Db          1 CCUCUGCUCCUGGUCCU 17


RESULT 135
AAT53582
ID   AAT53582 standard; RNA; 17 BP.
XX
AC   AAT53582;
XX
DT   25-MAR-2003  (revised)
DT   27-MAR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 1756).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Rattus rattus.
```

XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 202; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 0 A; 8 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 3.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 1.3e+02;
Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 537 CCTCTGCTCCTAGGCCT 553
||:|:||:||: | ||:
Db 1 CCUCUGCUCCUGGUCCU 17

RESULT 136

ABN00919
ID ABN00919 standard; DNA; 17 BP.
XX
AC ABN00919;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:911.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 911; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 6 A; 8 C; 3 G; 0 T; 0 U; 0 Other;

```
  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        678 GGACCCCCAGGGCCACA 694
              ||||||||| | |||||
Db          1 GGACCCCCAAGACCACA 17


RESULT 137
ABS75093/c
ID   ABS75093 standard; DNA; 17 BP.
XX
AC   ABS75093;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 619.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 156; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 5 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        542 GCTCCTAGGCCTCCCCA 558
              ||| ||| |||||||||
Db         17 GCTTCTATGCCTCCCCA 1


RESULT 138
ABS75092/c
ID   ABS75092 standard; DNA; 17 BP.
XX
AC   ABS75092;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 618.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 156; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 5 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 CTCCTAGGCCTCCCCAG 559
              || ||| ||||||||||
Db         17 CTTCTATGCCTCCCCAG 1


RESULT 139
ABT36083/c
ID   ABT36083 standard; DNA; 17 BP.
XX
AC   ABT36083;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 1720.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
```

XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 234; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 3.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 550 GCCTCCCCAGCGAGCTC 566
||||||||||| ||| ||
Db 17 GCCTCCCCAGGGAGATC 1

RESULT 140
ABZ65528
ID ABZ65528 standard; RNA; 17 BP.
XX
AC ABZ65528;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human HER2 DNAzyme substrate #985.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 4; Page 152; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 2 G; 0 T; 14 U; 0 Other;

Query Match 3.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 17.6%; Pred. No. 1.3e+02;
Matches 3; Conservative 12; Mismatches 2; Indels 0; Gaps 0;

Qy 583 TTTGTTCTGTTTTTCTA 599
:::|:: :|::::: :|
Db 1 UUUGUUUUGUUUUUUUA 17

RESULT 141
ACD53393
ID ACD53393 standard; RNA; 17 BP.
XX
AC ACD53393;
XX
DT 24-SEP-2003 (first entry)
XX
DE HBV G-cleaver substrate sequence #132.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis B virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX

```
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 167; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 1.3e+02;
  Matches   11;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        606 AGAGTACTGACTCTGCC 622
              ||| :||:| |:|:|||
Db          1 AGAAUACUGUCUCUGCC 17


RESULT 142
ACD51703
ID   ACD51703 standard; RNA; 17 BP.
XX
AC   ACD51703;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HBV inozyme substrate sequence #32.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 150; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 1.3e+02;
  Matches   11;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        605 CAGAGTACTGACTCTGC 621
              |||| :||:| |:|:||
Db          1 CAGAAUACUGUCUCUGC 17


RESULT 143
ABK98126
ID   ABK98126 standard; DNA; 18 BP.
XX
AC   ABK98126;
```

```
XX
DT   07-OCT-2002  (first entry)
XX
DE   Triple helix forming associated oligonucleotide #15.
XX
KW   Triple-helix formation; purine-rich target sequence; double-helix DNA;
KW   gene expression; regulatory sequence; pathogenic double-stranded DNA;
KW   pathogenic bacteria; virus; replication; virulence; cancer;
KW   oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.
XX
OS   Synthetic.
XX
PN   US6403302-B1.
XX
PD   11-JUN-2002.
XX
PF   16-DEC-1993;   93US-00168920.
XX
PR   17-SEP-1992;   92US-00946976.
XX
PA   (CALY ) CALIFORNIA INST OF TECHNOLOGY.
XX
PI   Dervan PB,  Beal PA;
XX
DR   WPI; 2002-536030/57.
XX
PT   A triple-helix comprising a double helical nucleic acid (DHNA) and an
PT   oligonucleotide which binds in parallel and antiparallel orientation,
PT   respectively, for targetting sequences on alternate strands of DHNA to
PT   control gene expression.
XX
PS   Example 7; Col 41; 108pp; English.
XX
CC   The present invention relates to methods and oligonucleotides for forming
CC   a triple-helix comprising a double helical nucleic acid comprising first
CC   and second substantially complementary strands, and an oligonucleotide
CC   bound to a purine-rich target sequence within the double helical nucleic
CC   acid, where the oligonucleotide binds in a parallel and antiparallel
CC   orientation, respectively, to target sequences on alternate strands of
CC   the double helical nucleic acid. The method has therapeutic applications,
CC   where gene expression is controlled by selective triple-helix formation
CC   within expression regulatory sequences of a target gene. The
CC   oligonucleotides can be used to form triple-helices, and are useful to
CC   detect the presence or absence of specific sequences within genomic DNA
CC   for diagnostic and therapeutic purposes. The oligonucleotides can be
CC   selected to specifically bind to pathogenic double-stranded DNA including
CC   specific sequences required by pathogenic bacteria or viruses for
CC   replication or virulence, reducing their pathogenicity. Alternatively,
CC   the oligonucleotide can be chosen to target a unique sequence of the
CC   pathogen which is not found in the genome of pathogen's host. The
CC   oligonucleotides can be used in cancer treatment by way of triple-helix
CC   suppression of specific oncogenes including those of endogenous or viral
CC   origin. Such therapeutic oligonucleotides are capable of forming triple-
CC   helices with such sequences in cancerous cells containing the activated
CC   oncogene, so preferentially killing or repressing the cancer causing
CC   cell. The present sequence represents an oligonucleotide used in the
CC   methods of the present invention
XX
SQ   Sequence 18 BP; 0 A; 2 C; 0 G; 14 T; 0 U; 2 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 1.4e+02;
  Matches   14;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        582 TTTTGTTCTGTTTTTCT 598
              ||:| ||||:|||||||
Db          2 TTDTTTTCTDTTTTTCT 18


RESULT 144
AAD12911
ID   AAD12911 standard; DNA; 19 BP.
XX
AC   AAD12911;
XX
DT   16-OCT-2001  (first entry)
XX
DE   PCR primer PA3 used in targetted cell killing in lymphoma cells.
XX
KW   Double stranded RNA dependent protein kinase; PKR; genetic locus;
KW   antisense; therapy; proliferative disorder; neoplastic disease;
KW   psoriasis; vasculogenesis; angiogenesis; cytostatic; bcl-2;
KW   immunoglobulin heavy chain; IgH; PCR primer; ss.
XX
OS   Unidentified.
XX
PN   WO200157205-A1.
XX
PD   09-AUG-2001.
XX
PF   31-JAN-2001; 2001WO-IL000094.
XX
PR   31-JAN-2000; 2000US-0179361P.
PR   22-DEC-2000; 2000US-0258010P.
XX
PA   (YISS ) YISSUM RES DEV CO HEBREW UNIV JERUSALEM.
XX
PI   Shir A,  Levitzky A;
XX
DR   WPI; 2001-488878/53.
XX
PT   Activating double stranded RNA dependent protein kinase in targeted cell
PT   population, by hybridizing antisense RNA with sequence at single genetic
PT   locus in the population, that is absent in non-targeted population.
XX
PS   Example 7; Page 23; 54pp; English.
XX
CC   The present invention relates to a method for selective killing of cells
CC   in a targetted cell population by selectively activating double stranded
CC   (ds) RNA dependent protein kinase (PKR). The method involves selecting
CC   sequence at single genetic locus in targetted cell population that is
CC   absent from equivalent locus in non-targetted cell population, obtaining
CC   anti-sense RNA having sequence homology with the genetic locus, and
CC   permitting anti-sense RNA to hybridise with the RNA transcribed from the
CC   genetic locus to form contiguous dsRNA for activating PKR. The method is
CC   also used for treating proliferative disorders such as neoplastic
CC   disease, psoriasis and vasculogenesis or angiogenesis. The present
CC   sequence is a PCR primer which is used in targetted cell killing in
CC   lymphoma cells
XX
SQ   Sequence 19 BP; 2 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        753 CAGGGTCCCTAGGCCTC 769
              ||||||||||  |||| |
Db          1 CAGGGTCCCTTGGCCCC 17


RESULT 145
AAF51148/c
ID   AAF51148 standard; DNA; 15 BP.
XX
AC   AAF51148;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2108.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
```

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 74; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 3 A; 1 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 648 CACAGACCTCAGTCT 662
|||| ||||||||||
Db 15 CACACACCTCAGTCT 1

RESULT 146
AAF51147/c
ID AAF51147 standard; DNA; 15 BP.
XX
AC AAF51147;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #2107.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 74; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 4 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 649 ACAGACCTCAGTCTT 663
||| ||||||||||
Db 15 ACACACCTCAGTCTT 1

RESULT 147
ABX15036/c
ID ABX15036 standard; DNA; 15 BP.
XX
AC ABX15036;
XX
DT 17-MAR-2003 (first entry)
XX
DE Human lactoferrin real-time PCR primer #2.
XX
KW Human; ss; PCR; primer; real-time PCR; otitis media; antimicrobial;
KW paranasal sinusitis; lysozyme; beat-defensin 1; beta-defensin 2;
KW lactoferrin; auditory; antiinflammatory.
XX
OS Homo sapiens.
XX
PN US2002141986-A1.
XX
PD 03-OCT-2002.
XX
PF 27-NOV-2001; 2001US-00998547.
XX
PR 28-NOV-2000; 2000US-0253492P.

XX
PA (LIMD/) LIM D J.
PA (LEEH/) LEE H.
PA (WEBS/) WEBSTER P.
PA (ANDA/) ANDALIBI A.
PA (LIJJ/) LI J.
PA (GANZ/) GANZ T.
XX
PI Lim DJ, Lee H, Webster P, Andalibi A, Li J, Ganz T;
XX
DR WPI; 2003-174127/17.
XX
PT New pharmaceutical preparation comprising lactoferrins, lysozyme or
PT defensins in an amount effective to reduce the growth of microbes, a salt
PT chelator, and a carrier, useful for treating of otitis media and
PT paranasal sinusitis.
XX
PS Example 1; Page 7; 23pp; English.
XX
CC The invention relates to a pharmaceutical preparation for the treatment
CC of otitis media and sinusitis, comprising at least one component, such as
CC lactoferrins, lysozyme or defensins (e.g. beta-defensin 1 or 2) in an
CC amount effective to reduce the growth of microbes, a salt chelator, and a
CC carrier. Also included is a method for treating microbial infections in a
CC mammal by administering to the mammal the pharmaceutical composition
CC cited above to reduce the number of causative infective agents. The
CC pharmaceutical preparation is useful for treating microbial infections of
CC the ear and sinuses, e.g. otitis media or paranasal sinusitis. The
CC invention provides molecules that are unlikely to induce antibiotic
CC resistance as compared to the existing antibiotics. These molecules do
CC not induce allergic reactions, since they are produced by the host. The
CC method of the invention is more cost-effective than the antibiotic
CC treatment. The present sequence is a real-time PCR primer used to assay
CC the expression of human lactoferrin in infected and normal middle ear
XX
SQ Sequence 15 BP; 4 A; 3 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 541 TGCTCCTAGGCCTCC 555
||||||| |||||||
Db 15 TGCTCCTCGGCCTCC 1

RESULT 148
AAV99300
ID AAV99300 standard; DNA; 17 BP.
XX
AC AAV99300;
XX
DT 26-APR-1999 (first entry)
XX
DE RSPaV antisense strand PCR primer RSP95F1.
XX
KW RSPaV-1; grape; transgenic plant; disease resistance; PCR; primer; ss.
XX
OS Synthetic.
OS Grapevine rupestris stem pitting associated virus.
XX
PN WO9852964-A1.
XX
PD 26-NOV-1998.
XX
PF 20-MAY-1998; 98WO-US010391.
XX
PR 20-MAY-1997; 97US-0047147P.
PR 17-DEC-1997; 97US-0069902P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Gonsalves D, Meng B;
XX
DR WPI; 1999-045297/04.
XX
PT Isolated proteins from Rupestris stem pitting-associated virus and
PT related nucleic acid - vectors, host cells and transgenic Vitis cultivars
PT that are resistant to the virus.
XX
PS Claim 60; Page 67; 163pp; English.
XX
CC This is the nucleotide sequence of primer RSP95F1, an antisense primer
CC designed for RT-PCR amplification of Rupestris stem pitting associated
CC virus (RSPaV) dsRNA. It has been used with sense strand primer RSP95R1
CC (see AAV99301) in RT-PCR amplifications of dsRNA obtained from randomly
CC selected grapvevines (Vitis) and 15 grapevine accessions. Oligonucleotide
CC primers (see AAV99294-307) capable of hybridising to a nucleic acid of
CC RSPaV are claimed. They can be used in a method of detecting the presence
CC of RSPaV, such as RSPaV-1 (see AAV99284), in a sample. The invention also
CC provides methods of imparting resistance to RSPaV to plants, especially
CC transgenic Vitis scion and rootstock cultivars
XX
SQ Sequence 17 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 762 TAGGCCTCCACTTCT 776
| |||||||||||||
Db 1 TGGGCCTCCACTTCT 15

RESULT 149
AAA36427/c
ID AAA36427 standard; DNA; 17 BP.
XX
AC AAA36427;
XX
DT 26-JUL-2000 (first entry)
XX
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:493.
XX
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;
KW tumour characterisation; hybridisation; ss.
XX
OS Homo sapiens.
XX
PN WO200018960-A2.
XX
PD 06-APR-2000.
XX
PF 24-SEP-1999; 99WO-US022283.
XX
PR 25-SEP-1998; 98US-0101757P.
XX
PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
XX
PI Landers JE, Jordan B, Housman DE, Charest A;
XX
DR WPI; 2000-293181/25.
XX
PT Detection of single nucleotide polymorphisms in genomes by preparation
PT and analysis of reduced complexity genomes, useful for genotyping,
PT fingerprinting and determining allele frequency of SNPs.
XX
PS Disclosure; Page 67; 111pp; English.
XX
CC A method has been developed for detecting the presence or absence of a
CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
CC method comprises preparing a reduced complexity genome (RCG) from the
CC genomic sample and analysing the RCG for the presence or absence of a SNP
CC allele. The method can be used to characterise a tumour, to generate a

```
CC   genomic pattern for an individual genome or to generate a genomic
CC   classification code for a genome. The method can be used to assess
CC   whether a subject is at risk for developing a disease or to identify a
CC   set of SNP alleles associated with a disease. The method can also be used
CC   to perform linkage analysis. AAA35944 to AAA35947 represent sequences
CC   used in the exemplification of the present invention. AAA35948 to
CC   AAA36632 represent nucleotide sequences containing SNPs
XX
SQ   Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        766 CCTCCACTTCTGAGG 780
              ||||| |||||||||
Db         16 CCTCCGCTTCTGAGG 2


RESULT 150
AAH95808/c
ID   AAH95808 standard; RNA; 17 BP.
XX
AC   AAH95808;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human Chk1 ribozyme substrate SEQ ID NO: 1233.
XX
KW   Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
KW   RNA cleavage; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157206-A2.
XX
PD   09-AUG-2001.
XX
PF   02-FEB-2001; 2001WO-US003504.
XX
PR   03-FEB-2000; 2000US-0179983P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (FATT/) FATTAEY A R.
XX
PI   Fattaey AR,  Jarvis T,  Mcswiggen J,  Booher RN,  Holman PS;
XX
DR   WPI; 2001-496922/54.
XX
PT   Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
PT   molecules, which downregulates expression of a checkpoint kinase-1 gene,
PT   useful for treating colorectal, lung, breast or prostate cancers.
XX
PS   Claim 4; Page 89; 115pp; English.
XX
CC   The present invention provides nucleic acid molecules capable of
CC   downregulating the expression of the human checkpoint kinase-1 (Chk1)
CC   gene. These may be antisense or ribozyme sequences, and are useful in the
CC   treatment of diseases associated with conditions affected by Chk1 levels,
CC   including cancer. The present sequence is an oligonucleotide described in
CC   the exemplification of the invention
XX
SQ   Sequence 17 BP; 3 A; 1 C; 7 G; 0 T; 6 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        798 AAGAGCTCTCCTCCA 812
              || ||||||||||||
Db         16 AAAAGCTCTCCTCCA 2


RESULT 151
ABA77941/c
ID   ABA77941 standard; DNA; 17 BP.
XX
AC   ABA77941;
XX
DT   24-JAN-2002  (first entry)
XX
DE   BRCA1 mutation correcting oligonucleotide SEQ ID NO: 787.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US009761.
XX
PR   27-MAR-2000; 2000US-0192176P.
PR   27-MAR-2000; 2000US-0192179P.
PR   01-JUN-2000; 2000US-0208538P.
PR   30-OCT-2000; 2000US-0244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 92; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 11 A; 4 C; 1 G; 1 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        582 TTTTGTTCTGTTTTT 596
              ||| ||||||||||
Db         16 TTTGGTTCTGTTTTT 2
```

```
RESULT 152
ABA77942
ID   ABA77942 standard; DNA; 17 BP.
XX
AC   ABA77942;
XX
DT   24-JAN-2002  (first entry)
XX
DE   BRCA1 mutation correcting oligonucleotide SEQ ID NO: 788.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US009761.
XX
PR   27-MAR-2000; 2000US-0192176P.
PR   27-MAR-2000; 2000US-0192179P.
PR   01-JUN-2000; 2000US-0208538P.
PR   30-OCT-2000; 2000US-0244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 92; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 1 A; 1 C; 4 G; 11 T; 0 U; 0 Other;

  Query Match              3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        582 TTTTGTTCTGTTTTT 596
              ||| ||||||||||||
Db          2 TTTGGTTCTGTTTTT 16
```

```
RESULT 153
ABN02147/c
ID   ABN02147 standard; DNA; 17 BP.
XX
AC   ABN02147;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2139.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 2139; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
```

```
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        683 CCCAGGGCCACACTG 697
              ||||||||||||| ||
Db         15 CCCAGGGCCACAATG 1


RESULT 154
ABN02146/c
ID   ABN02146 standard; DNA; 17 BP.
XX
AC   ABN02146;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2138.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 2138; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        683 CCCAGGGCCACACTG 697
              ||||||||||||| ||
Db         16 CCCAGGGCCACAATG 2


RESULT 155
ABN02145/c
ID   ABN02145 standard; DNA; 17 BP.
XX
AC   ABN02145;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2137.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 2137; 214pp; English.
```

```
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        683 CCCAGGGCCACACTG 697
              ||||||||||||| ||
Db         17 CCCAGGGCCACAATG 3


RESULT 156
ABV90405
ID   ABV90405 standard; DNA; 17 BP.
XX
AC   ABV90405;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1118.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1118; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        746 AGGGTCCCAGGGTCC 760
              |||| ||||||||||
Db          1 AGGGGCCCAGGGTCC 15


RESULT 157
ABV90401
ID   ABV90401 standard; DNA; 17 BP.
XX
AC   ABV90401;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1114.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
```

PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 1114; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 1.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 744 GTAGGGTCCCAGGGT 758
||||||.||||||||
Db 3 GTAGGGGCCCAGGGT 17

RESULT 158
ABK98192
ID ABK98192 standard; DNA; 17 BP.
XX
AC ABK98192;
XX
DT 07-OCT-2002 (first entry)
XX
DE Triple helix forming associated oligonucleotide #52.
XX
KW Triple-helix formation; purine-rich target sequence; double-helix DNA;
KW gene expression; regulatory sequence; pathogenic double-stranded DNA;
KW pathogenic bacteria; virus; replication; virulence; cancer;
KW oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.
XX
OS Synthetic.
XX
PN US6403302-B1.
XX
PD 11-JUN-2002.
XX
PF 16-DEC-1993; 93US-00168920.
XX
PR 17-SEP-1992; 92US-00946976.
XX
PA (CALY) CALIFORNIA INST OF TECHNOLOGY.
XX
PI Dervan PB, Beal PA;
XX
DR WPI; 2002-536030/57.
XX
PT A triple-helix comprising a double helical nucleic acid (DHNA) and an
PT oligonucleotide which binds in parallel and antiparallel orientation,
PT respectively, for targetting sequences on alternate strands of DHNA to
PT control gene expression.
XX
PS Example 7; Fig 25A; 108pp; English.
XX
CC The present invention relates to methods and oligonucleotides for forming
CC a triple-helix comprising a double helical nucleic acid comprising first
CC and second substantially complementary strands, and an oligonucleotide
CC bound to a purine-rich target sequence within the double helical nucleic
CC acid, where the oligonucleotide binds in a parallel and antiparallel
CC orientation, respectively, to target sequences on alternate strands of
CC the double helical nucleic acid. The method has therapeutic applications,
CC where gene expression is controlled by selective triple-helix formation
CC within expression regulatory sequences of a target gene. The
CC oligonucleotides can be used to form triple-helices, and are useful to
CC detect the presence or absence of specific sequences within genomic DNA
CC for diagnostic and therapeutic purposes. The oligonucleotides can be
CC selected to specifically bind to pathogenic double-stranded DNA including
CC specific sequences required by pathogenic bacteria or viruses for
CC replication or virulence, reducing their pathogenicity. Alternatively,
CC the oligonucleotide can be chosen to target a unique sequence of the
CC pathogen which is not found in the genome of pathogen's host. The
CC oligonucleotides can be used in cancer treatment by way of triple-helix
CC suppression of specific oncogenes including those of endogenous or viral
CC origin. Such therapeutic oligonucleotides are capable of forming triple-
CC helices with such sequences in cancerous cells containing the activated
CC oncogene, so preferentially killing or repressing the cancer causing
CC cell. The present sequence represents an oligonucleotide used in the
CC methods of the present invention
XX
SQ Sequence 17 BP; 0 A; 2 C; 0 G; 13 T; 0 U; 2 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.5e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 582 TTTTGTTCTGTTTTTCT 598
|| | |||| |||||||
Db 1 TTNTTTTCTNTTTTTCT 17

RESULT 159
ABT38175/c
ID ABT38175 standard; DNA; 17 BP.
XX
AC ABT38175;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 3812.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX

```
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 479; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        594 TTTCTACAACACAGA 608
              ||||||| ||||||
Db         17 TTTCTACAGCACAGA 3


RESULT 160
ACC64096
ID   ACC64096 standard; DNA; 17 BP.
XX
AC   ACC64096;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 1343.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 188; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        586 GTTCTGTTTTTCTAC 600
              | ||||||||||||||
Db          1 GATCTGTTTTTCTAC 15


RESULT 161
ACC66382/c
ID   ACC66382 standard; DNA; 17 BP.
XX
AC   ACC66382;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 3629.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 455; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
```

```
XX
SQ   Sequence 17 BP; 5 A; 1 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        594 TTTCTACAACACAGA 608
              ||||||||||| ||||
Db         17 TTTCTACAACCCAGA 3


RESULT 162
ADB43783/c
ID   ADB43783 standard; DNA; 17 BP.
XX
AC   ADB43783;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #4106.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 512; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 10 A; 1 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        832 TCTTTTCTTCTCTGA 846
              | ||||||||||||||
Db         17 TATTTTCTTCTCTGA 3


RESULT 163
AAT08673/c
ID   AAT08673 standard; DNA; 18 BP.
XX
AC   AAT08673;
XX
DT   05-SEP-1996  (first entry)
XX
DE   Primer P53-3X5SEQ for p53 gene exon 5 sequencing.
XX
KW   primer; PCR; polymerase chain reaction; hierarchy; immunoassay;
KW   quantitative assay; fragment length; DNA sequencing; p53; mutation; ss.
XX
OS   Synthetic.
XX
PN   WO9601909-A1.
XX
PD   25-JAN-1996.
XX
PF   07-JUL-1995;   95WO-US008605.
XX
PR   08-JUL-1994;   94US-00271946.
PR   14-FEB-1995;   95US-00388381.
XX
PA   (VISI-) VISIBLE GENETICS INC.
XX
PI   Diamandis E,  Dunn JM,  Stevens JK;
XX
DR   WPI; 1996-097638/10.
XX
PT   Testing for disease-associated p53 gene mutation(s) using a hierarchy of
PT   assay techniques - e.g. immunoassay, DNA amplification and DNA
PT   sequencing.
XX
PS   Claim 11; Page 26; 44pp; English.
XX
CC   Rapid and cost effective diagnosis of disease-associated mutations in the
CC   p53 gene is achieved by employing a selected number of diagnostic tools,
CC   in a hierarchy of increasing accuracy and cost per tool, in which each
CC   tool detects essentially no false positives. Tests that may be employed,
CC   in order of increasing accuracy and cost are: (a) immunoassays; (b) DNA
CC   fragment length/quantitiy analysis; and (c) DNA sequencing of regions
CC   most likely to harbour point mutations. AAT08667-85 are primers used in
CC   DNA sequencing analysis. The primers are generally nested inside the
CC   amplification primers (AAT08645-66), i.e. closer to the exon, although in
CC   some cases the preferred sequencing primer is in fact the amplification
CC   primer. The sequencing primer is conjugated to a fluorescent mol. such as
CC   fluorescein, rhodamine or cyanine. The present sequence is used to
CC   sequence the antisense strand of exon 5
XX
SQ   Sequence 18 BP; 3 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 18;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        751 CCCAGGGTCCCTAGG 765
              ||||||||||| |||
Db         15 CCCAGGGTCCCCAGG 1


RESULT 164
AAV30210/c
ID   AAV30210 standard; DNA; 18 BP.
```

XX
AC AAV30210;
XX
DT 11-SEP-1998 (first entry)
XX
DE Caenorhabditis elegans primer SHP59.
XX
KW clk-1 protein; developmental rate; longevity; cellular physiology;
KW cellular metabolism; cancer; PCR; primer; amplification; ss.
XX
OS Synthetic.
OS Caenorhabditis elegans.
XX
PN WO9817823-A1.
XX
PD 30-APR-1998.
XX
PF 17-OCT-1997; 97WO-CA000768.
XX
PR 21-OCT-1996; 96US-0028977P.
PR 18-DEC-1996; 96US-0033196P.
XX
PA (UYMC-) UNIV MCGILL.
XX
PI Hekimi S, Ewbank J, Barnes T, Lakowski B;
XX
DR WPI; 1998-261516/23.
XX
PT New Caenorhabditis elegans clk-1 gene - used to obtain human clk-1
PT sequence, useful for, e.g. cancer diagnosis.
XX
PS Disclosure; Page 15; 46pp; English.
XX
CC Primer SHP57 (AAV30208) was used with primer SHP58 (AAV30209) and primer
CC SHP59 in a nested PCR reaction to amplify the Caenorhabditis elegans clk-
CC 1 cDNA. The invention provides the C. elegans clk-1 protein (AAW56670)
CC which is involved in the developmental rate and longevity at the cellular
CC physiology level, where clk-1 mutants have a longer life and altered
CC cellular metabolism relative to wild-type. The clk-1 gene may be cloned
CC to identify related genes, for e.g the human clk-1 sequence can be
CC identified and may be useful in the diagnosis and/or prognosis of cancer.
CC The invention claims that downregulation of expression of clk-1 can be
CC used to increase the life span of animals or humans. The invention also
CC claims that if downregulation clk-1 expression could be targeted to a
CC particular tissue or organ, it could lead to a specific physiological
CC slowing down of this tissue/organ and a concomitant slower rate of
CC degradation by the ageing process. Alternatively, administration of an
CC agent to promote tissue- or organ-specific overexpression of clk-1 could
CC allow the physiological rates of tissues or organs to be increased, to
CC treat pathological conditions causing a slowdown of physiological rate of
CC tissues/organs in a patient
XX
SQ Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 827 GTGTCTCTTTTCTTC 841
||||| |||||||||
Db 18 GTGTCCCTTTTCTTC 4

RESULT 165
AAA55574
ID AAA55574 standard; DNA; 18 BP.
XX
AC AAA55574;
XX
DT 30-AUG-2000 (first entry)
XX
DE TRAF3 antisense oligonucleotide ISIS# 26792.
XX
KW Tumour necrosis factor receptor-associated factor; TRAF; human;
KW antisense oligonucleotide; phosphorothioate; antiproliferative;
KW anti-inflammatory; E-selectin; jun kinase; ss.
XX
OS Synthetic.
XX
PN WO200020435-A1.
XX
PD 13-APR-2000.
XX
PF 05-OCT-1999; 99WO-US023171.
XX
PR 06-OCT-1998; 98US-00167109.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsert LM, Monia BP, Xu XS;
XX
DR WPI; 2000-303732/26.
XX
PT Antisense oligonucleotides targeted to nucleic acids encoding human tumor
PT necrosis factor receptor-associated factor (TRAF), useful for treating
PT diseases associated with TRAF expression such as inflammatory diseases.
XX
PS Example 17; Page 56; 170pp; English.
XX
CC The present invention relates to antisense oligonucleotides (see AAA55496
CC -A55757) which are targeted to nucleic acids encoding a human tumour
CC necrosis factor receptor-associated factor (TRAF). The antisense
CC sequences comprise at least one modified internucleotide linkage, which
CC is a phosphorothioate linkage. The oligonucleotides also include at least
CC one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
CC Sequences AAA55490-A55495 represent nucleotide sequences encoding human
CC TRAF1-6. Included in the invention is a method for treating a human
CC having a disease associated with the expression of TRAF comprising
CC administering an antisense oligonucleotide. The reduction of jun kinase
CC activation in cells comprises contacting the cells with an antisense
CC oligonucleotide targeted to TRAF-6. A method for the reduction of E-
CC selectin expression in cells or tissues comprises contacting the cells or
CC tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6.
CC The antisense oligonucleotides have antiproliferative and anti-
CC inflammatory activity and are useful for treating disorders associated
CC with cell proliferation and inflammation. The antisense oligonucleotides
CC may also be used as a diagnostic probe for studying gene function
XX
SQ Sequence 18 BP; 4 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 770 CACTTCTGAGGGCAG 784
||||| |||||||||
Db 1 CACTTGTGAGGGCAG 15

RESULT 166
AAZ74047/c
ID AAZ74047 standard; DNA; 18 BP.
XX
AC AAZ74047;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker downstream amplification primer SEQ ID NO:8403.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.

XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 2022; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 18 BP; 4 A; 0 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 518 ACCAATACTTTCCCA 532
||||||||||| ||||
Db 16 ACCAATACTTCCCCA 2

RESULT 167
AAZ95437
ID AAZ95437 standard; cDNA; 18 BP.
XX
AC AAZ95437;
XX
DT 01-JUN-2000 (first entry)
XX
DE TEIL random binding site selection oligonucleotide #55.
XX
KW Tobacco; ethylene insensitive 3; TEIL; transcription factor; plant;
KW regulation; ethylene inducible gene; environmental stress; resistance;
KW ss.
XX
OS Nicotiana tabacum.
XX
PN WO200009712-A1.
XX
PD 24-FEB-2000.
XX
PF 06-MAY-1999; 99WO-JP002347.
XX
PR 11-AUG-1998; 98JP-00227448.
XX
PA (NORQ) NAT INST AGROBIOLOGICAL RESOURCES MIN.
PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.
XX
PI Ohashi Y, Kosugi S;
XX
DR WPI; 2000-206011/18.
XX
PT Transcription factor regulating the expression of ethylene-inducible
PT genes and gene encoding it, useful for imparting resistance to
PT environmental stress to plants.
XX
PS Example 3; Fig 5; 65pp; Japanese.
XX
CC The present invention describes a transcription factor regulating the
CC expression of ethylene-inducible genes in plants, having DNA binding
CC activity specific to the consensus sequence A(T/C)G(A/T)A(C/T)CT. The
CC present invention describes the tobacco ethylene insensitive 3 (EIN3)-
CC like protein, designated TEIL, isolated from Nicotiana tabacum cv Samsun
CC NN. The transcription factor is used to impart environmental stress
CC resistance to plants by transformation with the gene for the
CC transcription factor; and screening potential inhibitors of the
CC expression of ethylene-inducible genes in plants. AAZ95383 to AAZ95476
CC represent oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 3.4%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 720 GAGTGACTCTGGTCA 734
|||||| ||||||||
Db 4 GAGTGAGTCTGGTCA 18

RESULT 168
AAH45383/c
ID AAH45383 standard; DNA; 18 BP.
XX
AC AAH45383;
XX
DT 11-SEP-2001 (first entry)
XX
DE Corynebacterium thermoaminogenes dapA PCR primer #2.
XX
KW Heat-resistant; lysin biosynthesis; enzyme; coryneform;
KW aspartate-semialdehyde dehydrogenase; dapA; PCR primer; ss.
XX
OS Corynebacterium thermoaminogenes.
XX
PN JP2001120270-A.
XX
PD 08-MAY-2001.
XX
PF 01-NOV-1999; 99JP-00311148.
XX
PR 01-NOV-1999; 99JP-00311148.
XX
PA (AJIN) AJINOMOTO KK.
XX
DR WPI; 2001-364760/38.
XX
PT A heat-resistant lysin biosynthetic system enzyme gene of a high
PT temperature-resistant coryneform microbe.
XX
PS Example 2; Page 7; 27pp; Japanese.
XX
CC The invention relates to a gene from a high temperature-resistant
CC coryneform microbe that encodes a heat-resistant lysin biosynthetic
CC enzyme. The enzyme has aspartate-semialdehyde dehydrogenase activity and
CC can be used for growing amino acid-producing microbes. The present
CC sequence is a primer which was used to amplify DNA encoding a heat-
CC resistant lysin biosynthetic enzyme of the invention

```
XX
SQ   Sequence 18 BP; 6 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 18;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        661 CTTTCTCGAAGCTTG 675
              ||| ||||||||||||
Db         17 CTTCCTCGAAGCTTG 3


RESULT 169
ACF39450/c
ID   ACF39450 standard; DNA; 19 BP.
XX
AC   ACF39450;
XX
DT   26-SEP-2003  (first entry)
XX
DE   Acute lymphoblastic leukaemia assay related primer #12.
XX
KW   Simultaneous detection; multiple target nucleic acid molecule;
KW   biological sample; Exonuclease I; PCR; human papillomavirus; HPV;
KW   BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;
KW   bead array coded detection of multiple target; microarray;
KW   targeted genetic risk-stratification; primer; probe; ss.
XX
OS   Synthetic.
XX
PN   WO2003054149-A2.
XX
PD   03-JUL-2003.
XX
PF   06-DEC-2002; 2002WO-US039223.
XX
PR   07-DEC-2001; 2001US-0338442P.
PR   05-NOV-2002; 2002US-0423793P.
XX
PA   (UYMA-) UNIV MASSACHUSETTS.
XX
PI   Pihan G;
XX
DR   WPI; 2003-559133/52.
XX
PT   Simultaneously detecting the presence of multiple target nucleic acid
PT   molecules in a biological sample for optimizing risk-adapted therapy for
PT   a disorder by treating the enriched target nucleic acid molecules with
PT   Exonuclease I.
XX
PS   Example 1; Fig 6; 41pp; English.
XX
CC   The present invention describes a method for simultaneously detecting the
CC   presence of multiple target nucleic acid molecules in a biological sample
CC   comprising: (a) isolating and enriching target nucleic acid molecules
CC   from the biological sample; (b) treating the enriched target nucleic acid
CC   molecules with Exonuclease I; (c) performing linear PCR on the
CC   Exonuclease I treated enriched target nucleic acid molecule to produce
CC   linear PCR product where only a single primer is used; (d) obtaining
CC   beads coupled to an oligonucleotide molecule complementary to the
CC   amplified target nucleic acid molecules; (e) forming a mixture by mixing
CC   the beads and the enriched linear PCR product nucleic acid; (f) forming a
CC   reacted sample by incubating the mixture under conditions where if the
CC   enriched linear PCR product includes the target nucleic acid molecule,
CC   the enriched linear PCR product will hybridise to the oligonucleotide
CC   molecule; (g) analysing the reacted sample by determining the
CC   fluorescence of each bead analysed; and (h) detecting a level of
CC   fluorescence on the beads, where the level of fluorescence corresponds to
CC   a level of a target nucleic acid molecule in the biological sample. The
CC   method for simultaneously detecting the presence of multiple target
CC   nucleic acid molecules in a biological sample or for optimising risk-
CC   adapted therapy for a disorder associated with the target nucleic acid.
CC   ACF39439 to ACF39597 represent primers and probes used in the
CC   exemplification of the present invention
XX
SQ   Sequence 19 BP; 4 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        529 CCCAACATCCTCTGC 543
              ||||||  ||||||||
Db         15 CCCAACTTCCTCTGC 1


RESULT 170
AAX71712/c
ID   AAX71712 standard; RNA; 18 BP.
XX
AC   AAX71712;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hairpin ribozyme substrate #10.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 118; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 18 BP; 7 A; 2 C; 4 G; 0 T; 5 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        593 TTTTCTACAACACAGAGT 610
              |||||| ||||| | |||
Db         18 TTTTCTCCAACAGATAGT 1
```

```
RESULT 171
AAZ27756/c
ID   AAZ27756 standard; DNA; 18 BP.
XX
AC   AAZ27756;
XX
DT   23-DEC-1999  (first entry)
XX
DE   PCR primer for human DNA marker clone C221.
XX
KW   Tandem repeat sequence; DNA isolation; intermediate tandem repeat;
KW   ITR sequence; pentanucleotide tandem repeat; stutter artifact;
KW   DNA typing; DNA profiling; linkage analysis; criminal justice;
KW   paternity testing; animal lineage analysis; microsatellite loci;
KW   polymorphism detection; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9940194-A1.
XX
PD   12-AUG-1999.
XX
PF   04-FEB-1999;   99WO-US002345.
XX
PR   04-FEB-1998;   98US-00018584.
XX
PA   (PROM-) PROMEGA CORP.
XX
PI   Schumm JW,  Bacher JW;
XX
DR   WPI; 1999-590696/50.
XX
PT   Isolating DNA containing intermediate tandem repeat sequences, useful in
PT   DNA profiling.
XX
PS   Claim 30; Page 20; 111pp; English.
XX
CC   This sequence is a PCR primer for a human DNA marker clone used in the
CC   method of the invention. The method is for isolating a fragment of DNA
CC   containing an intermediate tandem repeat (ITR) sequence using
CC   hybridization selection, and comprises: (a) providing several DNA
CC   fragments, at least one of which contains an ITR sequence, a region of
CC   the DNA fragment which contains at least one repeat unit consisting of a
CC   sequence of five, six or seven bases repeated in tandem at least two
CC   times; (b) providing a stationary support having at least one
CC   oligonucleotide associated with it, where the oligonucleotide includes a
CC   sequence of nucleotides which is complementary to a portion of the ITR
CC   sequence; and (c) combining the DNA fragments with the support under
CC   conditions where the DNA fragments including the DNA fragment containing
CC   the ITR sequence hybridize to the support. The method is particularly
CC   used to isolate DNA containing pentanucleotide tandem repeat sequences as
CC   well as to detect target ITR DNA sequences having a low incidence of
CC   stutter artifacts (no more than 2.4%). The method is useful in DNA
CC   profiling for linkage analysis, criminal justice, paternity testing and
CC   other forensic and medical uses. DNA typing is also useful for confirming
CC   the lineage of horses, dogs and other prize animals. The invention
CC   overcomes problems related to the use of microsatellite loci in DNA
CC   profiling. The method can detect polymorphisms with a low incidence of
CC   stutter artifacts, which has previously been a problem in interpreting
CC   allelic content of loci. The development of markers based on larger
CC   repeat units, enables easier separation of the fragments on
CC   electrophoretic gels. This allows the simultaneous analysis of more loci
XX
SQ   Sequence 18 BP; 6 A; 5 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        536 TCCTCTGCTCCTAGGCCT 553
              || |||| |||| |||||
Db         18 TCATCTGGTCCTGGGCCT 1


RESULT 172
AAX52637/c
ID   AAX52637 standard; DNA; 18 BP.
XX
AC   AAX52637;
XX
DT   30-JUN-1999  (first entry)
XX
DE   Human genome biallelic marker primer 5.
XX
KW   Biallelic marker; human; high density disequilibrium map; disease; trait;
KW   identification; Alzheimer's disease; drug response; drug efficacy;
KW   drug toxicity; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9904038-A2.
XX
PD   28-JAN-1999.
XX
PF   17-JUL-1998;   98WO-IB001193.
XX
PR   18-JUL-1997;   97EP-00401740.
PR   21-APR-1998;   98US-0082614P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Tchoumakov I;
XX
DR   WPI; 1999-132278/11.
XX
PT   Production of biallelic markers - by obtaining a genomic DNA library,
PT   determining the order and sequence of DNA fragments and identifying
PT   nucleotides which vary between individuals.
XX
PS   Example 7; Page 187; 288pp; English.
XX
CC   This invention describes a novel method for obtaining a set of biallelic
CC   markers represented in AAX52533-X52632 and AAX52833-X52843 for use in
CC   constructing a high density equilibrium map of the human genome. The
CC   method involves (a) obtaining a nucleic acid library comprising genomic
CC   DNA fragments comprising the full genome or a portion (b) determining the
CC   order of genomic DNA fragments in the genome, (c) determining the
CC   sequence of selected regions of the genomic DNA fragments and (d)
CC   identifying nucleotides in the genomic DNA fragments which vary between
CC   individuals, thereby defining a set of biallelic markers. The methods can
CC   be used for identifying traits such as disease (e.g. Alzheimer's
CC   disease), drug response, drug efficacy and drug toxicity. They can be
CC   used for selecting an individual for inclusion in a clinical trial. The
CC   method is used to map the position of genes in a genome (preferably the
CC   human genome). The sequences described in AAX52633-X52832 and AAX52844-
CC   X52868 represent primers used in the method of the invention
XX
SQ   Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        641 CCTAAGTCACAGACCTCA 658
              ||| ||||||| || |||
Db         18 CCTGAGTCACACACATCA 1


RESULT 173
AAA09096
ID   AAA09096 standard; DNA; 18 BP.
XX
```

```
AC   AAA09096;
XX
DT   10-AUG-2000  (first entry)
XX
DE   PCR primer specific for prostate specific antigen promoter.
XX
KW   replication-deficient; vector; lacZ; beta-galactosidase; promoter;
KW   prostate specific antigen; cytotoxicity; cytostatic; pro-drug;
KW   prostate cancer; gene therapy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200020038-A1.
XX
PD   13-APR-2000.
XX
PF   01-OCT-1999;   99WO-US020907.
XX
PR   02-OCT-1998;   98US-00165730.
XX
PA   (GENO-) GENOTHERAPEUTICS INC.
XX
PI   Steiner MS;
XX
DR   WPI; 2000-303646/26.
XX
PT   Inducing cellular cytotoxicity of tumor cell comprises introducing
PT   replication-deficient adenovirus type 5 expression vector containing gene
PT   encoding for enzyme having ability to convert nontoxic prodrug into
PT   cancer killing drug.
XX
PS   Example 2; Page 58; 178pp; English.
XX
CC   Individual plaques were screened by PCR, using specific primers (AAA09095
CC   -97) for the probasin (PB), prostate specific antigen (PSA) and mouse
CC   mammary tumour virus (MMTV) promoters to determine the presence of a
CC   replication-deficient adenovirus type 5 vector containing a lacZ gene
CC   under the control of the respective promoter. Inducing cellular
CC   cytotoxicity of a tumor cell comprises introducing a replication-
CC   deficient adenovirus type 5 expression vector comprising a gene that
CC   encodes for an enzyme that has the ability to convert a non-toxic pro-
CC   drug into a cancer killing drug which then destroys cancer cells. The
CC   adenovirus genome preferably has a deletion in an E1 and E3 region and an
CC   insertion within the region of a nucleic acid encoding Escherichia coli
CC   beta-gal under the control of a promoter. The pro-drug active site is
CC   masked by beta-gal. Functional beta-gal is expressed from the vector so
CC   as to activate the pro-drug into an agent toxic to the cells. Beta-gal
CC   can be under the control of a Rous Sarcoma Virus (RSV), PB, PSA, MMTV
CC   promoter. The vectors provide a novel way to treat prostate cancer by
CC   gene therapy
XX
SQ   Sequence 18 BP; 1 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        625 GTTCCTGAGAGAGGCTCC 642
              | |||||| | ||||||||
Db          1 GCTCCTGGGGGAGGCTCC 18


RESULT 174
AAZ91393
ID   AAZ91393 standard; DNA; 18 BP.
XX
AC   AAZ91393;
XX
DT   22-MAY-2000  (first entry)
XX
DE   Human PTEN phosphorothioate antisense oligonucleotide #29559.
XX
KW   Human; PTEN; MMAC1; TEP1; phosphorothioate; antisense oligonucleotide;
KW   inhibition; protein phosphatase; tumour; diagnosis; inflammation;
KW   anticancer; anti-inflammatory; anti-infective; infection; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /note= "phosphorothioate linkages"
XX
PN   US6020199-A.
XX
PD   01-FEB-2000.
XX
PF   21-JUL-1999;   99US-00358381.
XX
PR   21-JUL-1999;   99US-00358381.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM;
XX
DR   WPI; 2000-181363/16.
XX
PT   New antisense compounds useful for treating, preventing or diagnosing
PT   e.g. tumors or inflammation, are targeted to the human dual specificity
PT   protein phosphatase (PTEN) sequence.
XX
PS   Claim 3; Col 41; 32pp; English.
XX
CC   The present invention describes phosphorothioate antisense
CC   oligonucleotides that are targeted to the 3'-untranslated region (UTR) of
CC   the sequence encoding a human dual specificity protein phosphatase
CC   designated PTEN (also known as MMAC1 and TEP1), and hybridise
CC   specifically to the human PTEN nucleotide sequence given in AAZ91361. The
CC   antisense oligonucleotides have anticancer, anti-inflammatory and anti-
CC   infective activities. The phosphorothioate antisense oligonucleotides can
CC   be used for diagnosis, treatment and prevention of PTEN-related diseases,
CC   e.g. infections, inflammation and tumours. The present sequence
CC   represents a phosphorothioate antisense oligonucleotide for human PTEN,
CC   from the present invention
XX
SQ   Sequence 18 BP; 1 A; 2 C; 5 G; 10 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        819 GGTTGGCTGTGTCTCTTT 836
              |||||||| ||||| | |
Db          1 GGTTGGCTTTGTCTTTAT 18


RESULT 175
AAZ94133
ID   AAZ94133 standard; cDNA; 18 BP.
XX
AC   AAZ94133;
XX
DT   06-AUG-2003  (revised)
DT   19-JUN-2000  (first entry)
XX
DE   Retroviral vector primer.
XX
KW   Haematopoietic stem cell; immune system disorder; leukaemia;
KW   antileukaemic; immunomodulator; therapy; mouse; PCR primer; ss.
XX
OS   Retroviridae.
XX
PN   WO200011168-A2.
XX
PD   02-MAR-2000.
XX
```

```
PF   20-AUG-1999;   99WO-US019052.
XX
PR   21-AUG-1998;   98US-00138132.
XX
PA   (UYPR-) UNIV PRINCETON.
XX
PI   Lemischka I,  Moore K;
XX
DR   WPI; 2000-237650/20.
XX
PT   Hematopoietic stem cell signaling proteins modulating replication and
PT   differentiation for treating immune system disorders and leukemia.
XX
PS   Example 2; Page 51; 256pp; English.
XX
CC   The present sequence is that of a retrovirus vector primer. NIH3T3 cells
CC   infected with recombinant retroviruses representative of a mouse lymphoid
CC   D2N cell cDNA library were selected for production of AA4 (see AAY79193),
CC   a molecular marker expressed on haematopoietic stem cells (HSC) and
CC   pogenitor cells. After 2 rounds of sorting, genomic DNA isolated from AA4
CC   -positive cells was subjected to PCR amplification using the present
CC   primer and the primer given in AAZ94134. Amplified cDNA was subcloned
CC   into pBluescript and REBNA vectors. AA4 cDNA (see AAZ94131) was obtained.
CC   The invention provides HSC-specific nucleic acids and encoded proteins
CC   that modulate HSC replication and differentiation. Also provided are
CC   methods for treating immune system disorders and leukaemia, and for
CC   expansion of stem cells ex vivo. (Updated on 06-AUG-2003 to correct OS
CC   field.)
XX
SQ   Sequence 18 BP; 2 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        650 CAGACCTCAGTCTTTCTC 667
              ||| ||||| || |||||
Db          1 CAGCCCTCACTCCTTCTC 18


RESULT 176
AAZ70837/c
ID   AAZ70837 standard; DNA; 18 BP.
XX
AC   AAZ70837;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker upstream amplification primer SEQ ID NO:5193.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB000822.
XX
PR   21-APR-1998;   98US-0082614P.
PR   23-NOV-1998;   98US-0109732P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1338; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        641 CCTAAGTCACAGACCTCA 658
              ||| ||||||| || |||
Db         18 CCTGAGTCACACACATCA 1


RESULT 177
AAZ70452
ID   AAZ70452 standard; DNA; 18 BP.
XX
AC   AAZ70452;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker upstream amplification primer SEQ ID NO:4808.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB000822.
XX
PR   21-APR-1998;   98US-0082614P.
PR   23-NOV-1998;   98US-0109732P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1256; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
```

```
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 18 BP; 5 A; 8 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        521 AATACTTTCCCAACATCC 538
              ||||||||  || ||| ||
Db          1 AATACTTTGCCCACACCC 18


RESULT 178
AAZ71009/c
ID   AAZ71009 standard; DNA; 18 BP.
XX
AC   AAZ71009;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker upstream amplification primer SEQ ID NO:5365.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB000822.
XX
PR   21-APR-1998;   98US-0082614P.
PR   23-NOV-1998;   98US-0109732P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1375; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 18 BP; 4 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        531 CAACATCCTCTGCTCCTA 548
              |||   ||||||||||||
Db         18 CAAGCCCCTCTGCTCCTA 1


RESULT 179
AAS14019
ID   AAS14019 standard; DNA; 18 BP.
XX
AC   AAS14019;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Human PTEN antisense oligonucleotide ISIS 29559.
XX
KW   Human; PTEN; MMAC1; TEP1; protein phosphatase; antisense; ss;
KW   antiinflammatory; cytostatic; antidiabetic; antilipaemic; infection;
KW   inflammation; tumour; diabetes; insulin resistance; insulin sensitivity;
KW   triglyceride control; cholesterol control; ISIS 29559.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1. .4
FT                    /*tag=  b
FT                    /note= "Optionally 2'-methoxyethyl residue (2'-MOE). When
FT                    1-4 are 2'-MOE all cytosines in this region are 5-
FT                    methylcytosines"
FT   modified_base    15. .18
FT                    /*tag=  c
FT                    /note= "Optionally 2'-methoxyethyl residue (2'-MOE). When
FT                    15-18 are 2'-MOE all cytosines in this region are 5-
FT                    methylcytosines"
XX
PN   US6284538-B1.
XX
PD   04-SEP-2001.
XX
PF   24-MAY-2000; 2000US-00577902.
XX
PR   21-JUL-1999;   99US-00358381.
PR   14-DEC-1999;   99WO-US029594.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM,  Mckay R;
XX
DR   WPI; 2001-588976/66.
XX
PT   New antisense oligonucleotides targeting nucleic acids encoding PTEN,
PT   useful for treating diabetes, increasing insulin sensitivity, or
PT   decreasing insulin resistance, blood triglyceride or cholesterol levels
PT   in a diabetic animal.
XX
PS   Example 15; Col 41; 38pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid encoding
CC   PTEN (a dual specificity protein phosphatase), where the compound is an
```

```
CC   antisense oligonucleotide. The antisense oligonucleotides are useful in
CC   modulating the function of nucleic acids encoding PTEN, ultimately
CC   modulating the amount of PTEN produced. The antisense compounds can used
CC   as diagnostics, therapeutics, prophylactics (e.g. to prevent or delay
CC   infection, inflammation or tumour formation), and as research agents and
CC   kits. The antisense compounds are also useful in treating diabetes,
CC   decreasing insulin resistance, increasing insulin sensitivity and
CC   decreasing blood triglyceride or cholesterol levels in a diabetic animal.
CC   The present sequence is an antisense oligonucleotide targetting the DNA
CC   encoding PTEN (also known as MMAC1/TEP1)
XX
SQ   Sequence 18 BP; 1 A; 2 C; 5 G; 10 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        819 GGTTGGCTGTGTCTCTTT 836
              ||||||||  |||||  | |
Db          1 GGTTGGCTTTGTCTTTAT 18


RESULT 180
AAD40054
ID   AAD40054 standard; DNA; 18 BP.
XX
AC   AAD40054;
XX
DT   22-OCT-2002  (first entry)
XX
DE   Human PTEN antisense oligonucleotide, ISIS 29599.
XX
KW   Human; phosphoinositide phosphatase; PTEN; liver; kidney; cholesterol;
KW   metabolic disease; diabetes; hyperproliferative; glucose; insulin; PEPCK;
KW   triglyceride; antisense gene therapy; cytostatic; adipose cell;
KW   antiproliferative; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1. .4
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    15. .18
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   US2002058638-A1.
XX
PD   16-MAY-2002.
XX
PF   11-JUN-2001; 2001US-00878582.
XX
PR   21-JUL-1999;   99US-00358381.
PR   14-DEC-1999;   99WO-US029594.
PR   24-MAY-2000; 2000US-00577902.
XX
PA   (MONI/) MONIA B P.
PA   (COWS/) COWSERT L M.
PA   (MCKA/) MCKAY R.
XX
PI   Monia BP,  Cowsert LM,  Mckay R;
XX
DR   WPI; 2002-479187/51.
XX
PT   New compound, preferably an antisense oligonucleotide, that hybridizes
PT   and inhibits the expression of phosphoinositide phosphatase (PTEN), for
PT   treating diseases such as diabetes, or a hyperproliferative condition.
XX
PS   Claim 7; Page 34; 39pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating the expression of phosphoinositide phosphatase (PTEN). The
CC   antisense compound is used to inhibit the expression of PTEN in cells or
CC   tissues, preferably human, or rodent, such as mouse or rat, liver, kidney
CC   or adipose cells or tissues. It is used to treat a disease or condition
CC   associated with PTEN, such as a metabolic disease or condition,
CC   preferably diabetes, especially Type 2 diabetes, or a hyperproliferative
CC   condition. It is also used to decrease blood glucose or insulin levels in
CC   an animal, preferably a diabetic human or rodent. It is also used to
CC   inhibit expression of PEPCK in cells or tissues. It is also used to
CC   decrease insulin resistance, or increase insulin sensitivity, in an
CC   animal, preferably a diabetic human or rodent. It is used to decrease
CC   blood triglyceride or cholesterol levels in an animal, preferably a
CC   diabetic human or rodent. It is also used in antisense gene therapy. The
CC   present sequence is an antisense oligonucleotide targetted to human PTEN
CC   DNA
XX
SQ   Sequence 18 BP; 1 A; 2 C; 5 G; 10 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        819 GGTTGGCTGTGTCTCTTT 836
              ||||||||  |||||  | |
Db          1 GGTTGGCTTTGTCTTTAT 18


RESULT 181
ABT06147/c
ID   ABT06147 standard; DNA; 18 BP.
XX
AC   ABT06147;
XX
DT   28-OCT-2002  (first entry)
XX
DE   Human light chain lambda gene related oligo SEQ ID No 161.
XX
KW   Single Primer Amplification; nested oligonucleotide extension reaction;
KW   hairpin; SPA; library; ds.
XX
OS   Homo sapiens.
XX
PN   WO200248401-A2.
XX
PD   20-JUN-2002.
XX
PF   10-DEC-2001; 2001WO-US047727.
XX
PR   11-DEC-2000; 2000US-0254669P.
PR   19-SEP-2001; 2001US-0323400P.
XX
PA   (ALEX-) ALEXION PHARM INC.
XX
PI   Bowdish KS,  Barbas-Frederickson S,  Lin Y,  Mcwhirter J,  Maruyama T;
XX
DR   WPI; 2002-500537/53.
XX
PT   Amplifying nucleic acid by synthesizing template nucleic acid containing
PT   a predetermined sequence and hairpin structure and using the template for
PT   target amplification by Single Primer Amplification.
XX
PS   Example 6; Page 35; 54pp; English.
XX
CC   The invention relates to a method for amplifying a nucleic acid using
CC   Single Primer Amplification (SPA). The method comprises synthesising a
CC   template nucleic acid containing a predetermined sequence and hairpin
CC   structure with the nested oligonucleotide extension reaction. The method
```

CC is useful for amplifying a nucleic acid, preferably for amplifying a
CC family of related nucleic acid sequences to build a complex library of
CC polypeptides encoded by the sequences. The engineered nucleic acid strand
CC is useful for amplifying a nucleic acid strand by providing a nucleic
CC acid with a predetermined sequence engineered onto its first end, a
CC sequence complementary to the predetermined sequence and a hairpin
CC structure between them and contacting the engineered nucleic acid strand
CC with a primer containing at least a portion of the predetermined
CC sequence. This process is done in the presence of a polymerase and
CC nucleotides under conditions suitable for polymerisation to produce a
CC complementary nucleic acid strand. The method of the invention is useful
CC for producing large amounts of a target nucleic acid sequence and for
CC amplifying simultaneously more than one different target nucleic acid
CC sequence located on the same or different nucleic acid molecules. This
CC polynucleotide sequence represents an oligonucleotide relating to the
CC invention
XX
SQ Sequence 18 BP; 2 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.3%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 849 ACAGCGTCCTGGCTCCAG 866
|||| ||||||| ||||
Db 18 ACAGGGTCCTGGGCCCAG 1

RESULT 182
ADB54704/c
ID ADB54704 standard; DNA; 18 BP.
XX
AC ADB54704;
XX
DT 04-DEC-2003 (first entry)
XX
DE Hybridisation oligonucleotide 242 used to analyse genomic DNA region.
XX
KW colon cell proliferative disorder; non methylated CpG dinucleotide;
KW cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
KW probe.
XX
OS Unidentified.
XX
PN WO2003072821-A2.
XX
PD 04-SEP-2003.
XX
PF 27-FEB-2003; 2003WO-EP002035.
XX
PR 27-FEB-2002; 2002EP-00004551.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
PI Rujan T, Schmitt A;
XX
DR WPI; 2003-731620/69.
XX
PT Detecting and differentiating between colon cell proliferative disorders
PT associated with a gene or its regulatory regions comprises contacting a
PT target nucleic acid in a biological sample obtained from the subject with
PT a reagent.
XX
PS Claim 36; Page 40; 74pp; English.
XX
CC The invention relates to a novel method for detecting and differentiating
CC between colon cell proliferative disorders associated with at least one
CC gene or its regulatory regions. The method comprises contacting a target
CC nucleic acid in a biological sample obtained from the subject with at
CC least one reagent or a series of reagents, where the reagent or series of
CC reagents, distinguishes between methylated and non methylated CpG
CC dinucleotides within the target nucleic acid. The molecules of the
CC invention demonstrate cytostatic activity whilst the method may useful
CC for detecting and differentiating between colon cell proliferative
CC disorders, including cancers such as colon adenoma and colon carcinoma.
CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
CC determining cytosine methylation state or single nucleotide
CC polymorphisms. The current sequence is that of the hybridisation
CC oligonucleotide of the invention which was used to analyse the genomic
CC DNA region.
XX
SQ Sequence 18 BP; 6 A; 0 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 3.3%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 512 CACAGTACCAATACTTTC 529
|| | |||||||| ||||
Db 18 CAAAATACCAATATTTTC 1

RESULT 183
ADC49308
ID ADC49308 standard; DNA; 18 BP.
XX
AC ADC49308;
XX
DT 18-DEC-2003 (first entry)
XX
DE Inhibitor of cell death associated oligonucleotide #1.
XX
KW cell death; apoptosis; ss.
XX
OS Synthetic.
XX
PN JP2003000271-A.
XX
PD 07-JAN-2003.
XX
PF 19-OCT-2001; 2001JP-00322357.
XX
PR 26-MAR-2001; 2001JP-00088922.
XX
PA (KYOW) KYOWA HAKKO KOGYO KK.
XX
DR WPI; 2003-472928/45.
XX
PT Polypeptide, a new DNA, a new antibody and a new gene-modified animal.
XX
PS Disclosure; SEQ ID NO 5; 47pp; Japanese.
XX
CC The invention relates to a polypeptide of mouse origin and having an
CC activity of inhibiting cell death. The polypeptide is useful for the
CC preparation of drugs. The present sequence is used in the exemplification
CC of the current invention.
XX
SQ Sequence 18 BP; 2 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 650 CAGACCTCAGTCTTTCTC 667
||| ||||| || |||||
Db 1 CAGCCCTCACTCCTTCTC 18

RESULT 184
ADC70279/c
ID ADC70279 standard; DNA; 18 BP.
XX
AC ADC70279;
XX
DT 18-DEC-2003 (first entry)

XX
DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 769).
XX
KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
KW cytosine methylation state.
XX
OS Unidentified.
XX
PN WO2003052135-A2.
XX
PD 26-JUN-2003.
XX
PF 10-DEC-2002; 2002WO-EP014026.
XX
PR 14-DEC-2001; 2001DE-01061625.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
PI Nimmrich I;
XX
DR WPI; 2003-533029/50.
XX
PT Detecting and differentiating cytosine methylation state of genomic DNA,
PT useful for diagnosing, treating prognosticating and/or monitoring lung
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
PT carcinoma.
XX
PS Claim 15; SEQ ID NO 769; 58pp; English.
XX
CC This invention relates to a novel method for detecting and
CC differentiating between lung cell proliferative disorders associated with
CC at least one gene and/or their regulatory regions. Specifically, it
CC refers to a method comprising contacting a target nucleic acid in a
CC biological sample with at least one reagent, wherein the reagent is able
CC to distinguish between methylated and non-methylated CpG dinucleotides
CC present in the target DNA. As such, it is possible to further
CC differentiate and diagnose medical conditions including adenocarcinoma
CC and squamous cell carcinoma, and their respective adjacent lung tissue.
CC The present invention describes cytostatic oligomers and PNA-oligomers
CC that are useful as probes for determining the cytosine methylation state
CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
CC oligonucleotide sequence is a primer oligomer used for the analysis of
CC CpG positions within genomic DNA, used in an exemplification of the
CC invention.
XX
SQ Sequence 18 BP; 6 A; 0 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 3.3%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 512 CACAGTACCAATACTTTC 529
|| | |||||||| ||||
Db 18 CAAAATACCAATATTTTC 1

RESULT 185
ABC02170/c
ID ABC02170 standard; DNA; 13 BP.
XX
AC ABC02170;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 2161 for detecting SNP TSC0000865.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 2161; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 521 AATACTTTCCCAA 533
|||||||||||||
Db 13 AATACTTTCCCAA 1

RESULT 186
ABC02171
ID ABC02171 standard; DNA; 13 BP.
XX
AC ABC02171;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 2162 for detecting SNP TSC0000865.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX

```
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 2162; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        521 AATACTTTCCCAA 533
              |||||||||||||
Db          1 AATACTTTCCCAA 13


RESULT 187
ABZ72890/c
ID   ABZ72890 standard; RNA; 14 BP.
XX
AC   ABZ72890;
XX
DT   09-APR-2003  (first entry)
XX
DE   Rod opsin hairpin ribozyme oligonucleotide.
XX
KW   Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target;
KW   ophthalmological; gene therapy; eye; retinal dysfunction; AAV;
KW   diabetic retinopathy; macular degeneration; autosomal dominant retinitis;
KW   blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO200288320-A2.
XX
PD   07-NOV-2002.
XX
PF   01-MAY-2002; 2002WO-US013679.
XX
PR   01-MAY-2001; 2001US-00847601.
XX
PA   (UYFL ) UNIV FLORIDA.
XX
PI   Lewin AS,  Shaw LC,  Grant MB;
XX
DR   WPI; 2003-111880/10.
XX
PT   A recombinant adeno-associated virus-vectored ribozyme composition,
PT   useful for treating a disease or dysfunction of the mammalian eye e.g.
PT   retinal disease, e.g. diabetic retinopathy or age-related macular
PT   degeneration.
XX
PS   Example 5; Page 63; 115pp; English.
XX
CC   The present invention describes a recombinant adeno-associated virus
CC   (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a
CC   first ribozyme that specifically cleaves an mRNA encoding a protein,
CC   polypeptide, or peptide selected from the group of rod opsin, iNOS,
CC   RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin
CC   alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a
CC   vector comprising a polynucleotide encoding the ribozyme, where the
CC   polynucleotide operably positioned downstream of at least a first
CC   promoter that directs expression of the polynucleotide in a selected
CC   mammalian cell transformed with the vector; (c) a viral particle
CC   comprising the ribozyme or the polynucleotide; (d) an AAV vector
CC   comprising the ribozyme or the polynucleotide; or (e) a host cell
CC   comprising the ribozyme or the polynucleotide. Also described is a method
CC   for decreasing the amount of mRNA encoding a selected polypeptide in a
CC   retinal cell of a mammalian eye, comprising providing to the eye the
CC   composition described above, and for a time effective to specifically
CC   cleave the mRNA in the cell. (I) has ophthalmological activity, and can
CC   be used in gene therapy. (I) can be used for treating a disease or
CC   dysfunction of the mammalian eye, such as a retinal disease or retinal
CC   dysfunction, (diabetic) retinopathy, or (age-related) macular
CC   degeneration. (I) is also useful for manufacturing a medicament for
CC   treating the diseases mentioned above, including autosomal dominant
CC   retinitis or a blood-retinal barrier dysfunction. (I) can also be useful
CC   for treating, decreasing the severity, or ameliorating the symptoms of a
CC   pathological condition, e.g. atrophic or pigmented lesions of the eye,
CC   blindness, a reduction in central or peripheral vision, or a reduction in
CC   total vision. ABZ72763 to ABZ72953 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 14 BP; 3 A; 4 C; 4 G; 0 T; 3 U; 0 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        770 CACTTCTGAGGGC 782
              |||||||||||||
Db         13 CACTTCTGAGGGC 1


RESULT 188
AAS95330/c
ID   AAS95330 standard; DNA; 15 BP.
XX
AC   AAS95330;
XX
DT   14-FEB-2002  (first entry)
XX
DE   Human Histamine H2 receptor ASO PCR primer #10.
XX
KW   Human; histamine H2 receptor; HRH2; ss; PCR primer; polymorphic variant;
KW   haplotyping; genotyping; acid-peptic disorder; mammary cancer;
KW   gastric carcinoma; allele specific oligonucleotide; ASO.
XX
OS   Homo sapiens.
XX
PN   WO200179220-A2.
XX
PD   25-OCT-2001.
XX
PF   12-APR-2001; 2001WO-US011941.
XX
PR   12-APR-2000; 2000US-0196406P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Choi JY,  Koshy B;
XX
DR   WPI; 2002-055249/07.
XX
PT   New human histamine H2 receptor (HRH2) isogene polymorphic variants,
PT   useful in expressing HRH2 protein for use in screening for candidate
PT   drugs to treat diseases related to HRH2 activity.
XX
PS   Claim 15; Page 13; 62pp; English.
```

XX
CC The invention relates to an isolated polynucleotide comprising a
CC polymorphic variant of a reference sequence for human Histamine H2
CC receptor (HRH2) gene, its fragment or complement, and the polymorphic
CC variant contains an HRH2 isogene defined by a haplotype listed in the
CC specification. Also disclosed are methods for haplotyping and genotyping
CC the HRH2 gene of an individual, a method for predicting a haplotype pair
CC for the HRH2 gene of an individual, identifying an association between a
CC trait and at least one haplotype or haplotype pair of HRH2 gene, allele
CC specific oligonucleotides (ASO) for performing the haplotyping/
CC genotyping, a recombinant nonhuman organisms transformed or transfected
CC with the polymorphic variant, the protein expressed by the polymorphic
CC variant, an antibody raised against the protein and screening for drugs
CC targeting the polypeptide by contacting HRH2 polymorphic variant with a
CC candidate agent and assaying for binding activity. The polymorphisms are
CC useful for studying the biological function of HRH2 gene, as well as in
CC identifying drugs targeting this protein for the treatment of disorder
CC related to its abnormal expression or function. The polymorphic variants
CC may be used in screening for compounds targeting CALM1 to treat a
CC specific condition or disease predicted to be associated with HRH2
CC activity, in studying the effect of the variation on the biological
CC activity of HRH2 as well as on the binding affinity of candidate drugs
CC targeting HRH2 for the treatment of acid-peptic disorders of the
CC gastrointestinal tract and also possibly human mammary cancer and gastric
CC carcinoma. The polymorphism and haplotype data can also be used for
CC validating whether HRH2 is a suitable drug target for drugs to treat acid
CC -peptic disorders of the gastrointestinal tract, screening of such drugs
CC and reducing bias in clinical trials of such drugs. The present sequence
CC is an ASO PCR primer used to detect the polymorphisms of the invention
XX
SQ Sequence 15 BP; 4 A; 2 C; 8 G; 0 T; 0 U; 1 Other;

Query Match 3.3%; Score 13; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 1.5e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 541 TGCTCCTAGGCCTCC 555
|:||||| |||||||
Db 15 TRCTCCTCGGCCTCC 1

RESULT 189
AAD26056/c
ID AAD26056 standard; DNA; 15 BP.
XX
AC AAD26056;
XX
DT 26-MAR-2002 (first entry)
XX
DE Human apolipoprotein E (APOE) gene polymorphism detecting ASO primer #7.
XX
KW Human; antilipaemic; neuroprotective; nootropic; genetic variant; APOE;
KW apolipoprotein E; haplotyping; familial dysbetalipoproteinaemia; therapy;
KW genotyping; type III hyperlipoproteinaemia; Alzheimer's disease;
KW atherosclerosis; polymorphism; allele specific oligonucleotide;
KW ASO primer; ss.
XX
OS Homo sapiens.
XX
PN WO200179234-A2.
XX
PD 25-OCT-2001.
XX
PF 16-APR-2001; 2001WO-US012303.
XX
PR 14-APR-2000; 2000US-0197188P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Choi JY, Kliem SE, Koshy B, Lee HH;
XX
DR WPI; 2002-075064/10.
XX
PT Genotyping human apolipoprotein gene of individual for determining
PT haplotype of individual, involves determining identity of nucleotide pair
PT at specific polymorphic sites for two copies of gene.
XX
PS Claim 16; Page 14; 78pp; English.
XX
CC The patent discloses novel genetic variants of human apolipoprotein E
CC (APOE) gene. The invention also relates to compositions and methods for
CC haplotyping and/or genotyping the APOE gene. The haplotyping methods of
CC the invention are useful for improving the efficacy and reliability of
CC several steps in the discovery and development of drugs for treating
CC diseases associated with APOE activity, e.g. familial
CC dysbetalipoproteinaemia, type III hyperlipoproteinaemia, atherosclerosis,
CC and Alzheimer's disease. They are useful to validate APOE as a candidate
CC agent for treating a specific condition or disease predicted to be
CC associated with APOE activity and in the design of clinical trials of
CC candidate drugs for treating a specific condition or disease predicted to
CC be associated with APOE activity. Genotyping or haplotyping methods are
CC useful to screen for compounds targeting APOE to treat a specific
CC condition or disease associated with APOE activity. The present DNA
CC sequence is an allele specific oligonucleotide (ASO) primer which is used
CC for detecting human APOE gene polymorphisms
XX
SQ Sequence 15 BP; 3 A; 4 C; 6 G; 1 T; 0 U; 1 Other;

Query Match 3.3%; Score 13; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 1.5e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 747 GGGTCCCAGGGTCCC 761
|: ||||||||||||
Db 15 GSTTCCCAGGGTCCC 1

RESULT 190
AAD43403
ID AAD43403 standard; DNA; 15 BP.
XX
AC AAD43403;
XX
DT 14-NOV-2002 (first entry)
XX
DE Human CYP3A5 gene polymorphism detecting ASO primer #31.
XX
KW Human; cytochrome P450; subfamily IIIA; polypeptide 5 isogene; CYP3A5;
KW drug screening; polymorphism; haplotype; drug metabolising disorder;
KW gene therapy; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200246209-A2.
XX
PD 13-JUN-2002.
XX
PF 07-DEC-2001; 2001WO-US047218.
XX
PR 08-DEC-2000; 2000US-0254367P.
PR 03-MAY-2001; 2001US-0288470P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Anastasio AE, Han J, Kliem SE, Rounds E;
XX
DR WPI; 2002-636448/68.
XX
PT Novel isolated polynucleotide which is a polymorphic variant of
PT cytochrome P450, subfamily IIIA, polypeptide 5 (CYP3A5) gene useful for
PT expressing CYP3A5 protein isoform used in drug screening techniques.
XX
PS Claim 15; Page 16; 127pp; English.
XX
CC The invention relates to isolated polynucleotide having cytochrome P450,
CC subfamily IIIA, polypeptide 5 isogene (CYP3A5). The invention is useful

CC for screening drugs. The invention is useful for studying expression and
CC function of CYP3A5 and expressing CYP3A5 protein for use in screening for
CC candidate drugs to treat diseases related to CYP3A5 activity. The
CC polymorphism and haplotype data is useful for validating whether CYP3A5
CC is a suitable target for drugs to treat drug metabolising disorders,
CC screening for such drugs and reducing bias in clinical trials of such
CC drugs. The invention is also useful for therapeutic purposes. The
CC invention is useful in studying the effect of variation on the biological
CC activity of CYP3A5 as well as on the binding affinity of candidate drugs
CC to CYP3A5, or for studying the enzymatic properties of such CYP3A5
CC variants using these candidate drugs as substrate. The invention is
CC useful in gene therapy. The present sequence is human CYP3A5 gene
CC polymorphism detecting ASO (allele-specific oligonucleotide) primer
XX
SQ Sequence 15 BP; 0 A; 1 C; 2 G; 11 T; 0 U; 1 Other;

Query Match 3.3%; Score 13; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 1.5e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 583 TTTGTTCTGTTTTTC 597
||||||:|||||||:|
Db 1 TTTGTTTTGTTTTYC 15

RESULT 191
AAL41830
ID AAL41830 standard; DNA; 15 BP.
XX
AC AAL41830;
XX
DT 25-APR-2002 (first entry)
XX
DE Human GCNT1 allele specific primer SEQ ID NO: 15.
XX
KW Human; glucosaminyl (N-acetyl) transferase 1, core 2; GCNT1; cancer;
KW gene therapy; haplotype; chromosome 9q13; SNP; primer; cytostatic;
KW single nucleotide polymorphism; ss.
XX
OS Homo sapiens.
XX
PN WO200204470-A2.
XX
PD 17-JAN-2002.
XX
PF 06-JUL-2001; 2001WO-US021451.
XX
PR 06-JUL-2000; 2000US-0216281P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Duda A, Finkel K, Koshy B;
XX
DR WPI; 2002-171696/22.
XX
PT Genetic variants of glucosaminyl (N-acetyl) transferase 1, core 2 gene
PT useful in studying expression and function of the protein, and for
PT screening drugs to treat diseases e.g. cancer.
XX
PS Claim 16; Page 13; 72pp; English.
XX
CC The present invention provides the gene, protein and cDNA sequences of
CC the human glucosaminyl (N-acetyl) transferase 1, core 1 (GCNT1). Also
CC identified are single nucleotide polymorphisms (SNPs) located within the
CC sequences. The sequences can be used in the treatment of GCNT1 related
CC diseases, including cancer. The present sequence is an allele specific
CC primer for the GCNT1 gene, which is located on chromosome 9q13
XX
SQ Sequence 15 BP; 3 A; 7 C; 2 G; 2 T; 0 U; 1 Other;

Query Match 3.3%; Score 13; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 1.5e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 553 TCCCCAGCGAGCTCC 567
||||||| ||||:|
Db 1 TCCCCAGCAAGCTYC 15

RESULT 192
AAQ48328/c
ID AAQ48328 standard; DNA; 16 BP.
XX
AC AAQ48328;
XX
DT 25-MAR-2003 (revised)
DT 03-MAR-1994 (first entry)
XX
DE MAb 25D2 primer B1902.
XX
KW Heavy; VH; light; VL; chain; variable region; antihuman; interleukin-4;
KW IL-4; monoclonal antibody; MAb; 25D2; single chain binding protein;
KW complementarity determining region; CDR; humanised; Fv region; BABS;
KW antagonist; polymerase chain reaction; PCR; primer; amplify; ss.
XX
OS Synthetic.
XX
PN WO9317106-A1.
XX
PD 02-SEP-1993.
XX
PF 18-FEB-1993; 93WO-US001301.
XX
PR 19-FEB-1992; 92US-00841659.
XX
PA (SCHE) SCHERING CORP.
XX
PI Abrams JS, Dalie B, Le HV, Miller K, Murgolo NJ, Nguyen H;
PI Pearce M, Tindall S, Zavodny PJ;
XX
DR WPI; 1993-288412/36.
XX
PT Monoclonal antibodies against human interleukin-4 corresp. DNA and CDRs -
PT are useful for detection of interleukin-4 and treatment of related
PT diseases.
XX
PS Example 8; Page 77; 114pp; English.
XX
CC The sequences given in AAQ48323-33 are primers which were used in the
CC cloning of the heavy (H) and light (L) chains of the antihuman
CC interleukin-4 (IL-4) monoclonal antibody (MAb) 25D2. The complementarity
CC determining regions (CDRs) of this antibody may be grafted onto a human
CC antibody to produce a humanised antibody. It may also be desirable to
CC include one or more amino acid residues which, while outside the CDRs,
CC are likely to interact with the CDRs or IL-4. These sequences may also be
CC used to produce single chain IL-4 binding proteins comprising linked
CC heavy and light chain fragments of the Fv region, or biosynthetic
CC antibody binding sites. The humanised MAb is an IL-4 antagonist. It may
CC be used in a pharmaceutical composition for detecting, measuring and
CC immuno- purifying human IL-4 and blocking IL-4 activity in IL-4-related
CC diseases. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 16 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 718 GAGAGTGACTCTG 730
||||||||||||
Db 16 GAGAGTGACTCTG 4

RESULT 193
AAQ98837/c
ID AAQ98837 standard; DNA; 16 BP.

```
XX
AC   AAQ98837;
XX
DT   19-APR-1996  (first entry)
XX
DE   Anti-human IL-4 MAb h25D2-9 variable region PCR primer B1902.
XX
KW   Anti-human interleukin-4; IL-4; humanised; purification; treatment;
KW   IL-4 diseases; immunoassay; variable region; h25D2-9; PCR primer B1902;
KW   antibody; ss.
XX
OS   Synthetic.
XX
PN   WO9524481-A2.
XX
PD   14-SEP-1995.
XX
PF   08-MAR-1995;   95WO-US002400.
XX
PR   10-MAR-1994;   94US-00208886.
XX
PA   (SCHE ) SCHERING CORP.
XX
PI   Dalie B,  Miller K,  Murgolo N,  Tindall S;
XX
DR   WPI; 1995-328272/42.
XX
PT   Humanised monoclonal antibody against human interleukin (IL)-4 - has
PT   increased binding affinity and expression, and hence greater therapeutic
PT   value in the treatment of IL-4 related diseases.
XX
PS   Example 1; Page 70; 116pp; English.
XX
CC   The primers AAQ98832-42 were used in the PCR amplification of the anti-
CC   human IL-4 humanised monoclonal antibody (MAb) h25D2-9 cDNA. The Ab
CC   encoded by the cDNA can be used for the prepn., purifcn. and immunoassay
CC   of the humanised Abs. Pharmaceutical compsns. and anti-idiotypic Abs
CC   (against the MAb) can also be prepd. for the treatment of IL-4 related
CC   diseases by respectively suppressing, or imitating the binding activity
CC   of IL-4
XX
SQ   Sequence 16 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         718 GAGAGTGACTCTG 730
               |||||||||||||
Db          16 GAGAGTGACTCTG 4


RESULT 194
AAX09974/c
ID   AAX09974 standard; DNA; 16 BP.
XX
AC   AAX09974;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker downstream primer #280.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
XX
PS   Claim 16; Page 85; 310pp; English.
XX
CC   AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC   isolation of various biallelic polymorphic markers found in the human
CC   genome (represented in AAX10269-X12937). These primers can be used in a
CC   method for determining polymorphic forms in an individual for use in e.g.
CC   forensics, paternity testing or for phenotypic typing for diseases such
CC   as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC   hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 16 BP; 3 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         750 TCCCAGGGTCCCT 762
               |||||||||||||
Db          16 TCCCAGGGTCCCT 4


RESULT 195
AAV96653/c
ID   AAV96653 standard; RNA; 17 BP.
XX
AC   AAV96653;
XX
DT   01-MAR-1999  (first entry)
XX
DE   Potato citrate synthase target sequence position 1383.
XX
KW   Solanidine; glucosyltransferase; potato; citrate synthase; target;
KW   hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis;
KW   flower formation; cleavage; solanaceous plant; ss.
XX
OS   Solanum tuberosum.
XX
PN   WO9832843-A2.
XX
PD   30-JUL-1998.
XX
PF   14-JAN-1998;   98WO-US000738.
XX
PR   28-JAN-1997;   97US-0036545P.
PR   28-JAN-1997;   97US-0036599P.
PR   24-NOV-1997;   97US-00979416.
XX
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PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Zwick MG, Mcswiggen JA;
XX
DR WPI; 1998-427939/36.
XX
PT New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid
PT biosynthesis or regulating flowering.
XX
PS Claim 53; Page 56; 79pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC -cleaving activity (e.g. ribozymes) which are capable of modulating the
CC expression of plant genes: (i) involved in biosynthesis of alkaloids; or
CC (ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to
CC AAV96354 represent potato solanidine glucosyltransferase hammerhead and
CC hairpin ribozymes, respectively. AAV95629 to AAV95981, and AAV96355 to
CC AAV96734 represent potato solanidine glucosyltransferase target
CC sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent
CC potato citrate synthase hammerhead and hairpin ribozymes, respectively.
CC AAV96735 to AAV96772, and AAV97196 to AAV97220 represent potato citrate
CC synthase target sequences. Ribozymes of the present invention can be used
CC to inhibit the synthesis of toxic alkaloids in solanaceous plants,
CC particularly potato but also tomato, pepper, aubergine and ditura or to
CC inhibit flowering in potato, lettuce, spinach, cabbage, brussel sprouts,
CC arugula, kale, collards, chard, beet, turnip, sweet potato and turf
CC grass. Also the ribozymes can be used for RNA manipulation in the same
CC way that restriction endonucleases are for DNA, as well as to examine
CC genetic drift and mutations in plants and to detect specific RNA. The
CC ribozymes can be targeted to specific genes or to consensus sequences
CC within a family of related genes, and being catalytic need to be present
CC at only very low concentrations
XX
SQ Sequence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 794 TGCCAAGAGCTCT 806
||||||||||||||
Db 13 TGCCAAGAGCTCT 1

RESULT 196
AAV96652/c
ID AAV96652 standard; RNA; 17 BP.
XX
AC AAV96652;
XX
DT 01-MAR-1999 (first entry)
XX
DE Potato citrate synthase target sequence position 1381.
XX
KW Solanidine; glucosyltransferase; potato; citrate synthase; target;
KW hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis;
KW flower formation; cleavage; solanaceous plant; ss.
XX
OS Solanum tuberosum.
XX
PN WO9832843-A2.
XX
PD 30-JUL-1998.
XX
PF 14-JAN-1998; 98WO-US000738.
XX
PR 28-JAN-1997; 97US-0036545P.
PR 28-JAN-1997; 97US-0036599P.
PR 24-NOV-1997; 97US-00979416.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Zwick MG, Mcswiggen JA;
XX
DR WPI; 1998-427939/36.
XX
PT New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid
PT biosynthesis or regulating flowering.
XX
PS Claim 53; Page 56; 79pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC -cleaving activity (e.g. ribozymes) which are capable of modulating the
CC expression of plant genes: (i) involved in biosynthesis of alkaloids; or
CC (ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to
CC AAV96354 represent potato solanidine glucosyltransferase hammerhead and
CC hairpin ribozymes, respectively. AAV95629 to AAV95981, and AAV96355 to
CC AAV96734 represent potato solanidine glucosyltransferase target
CC sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent
CC potato citrate synthase hammerhead and hairpin ribozymes, respectively.
CC AAV96735 to AAV96772, and AAV97196 to AAV97220 represent potato citrate
CC synthase target sequences. Ribozymes of the present invention can be used
CC to inhibit the synthesis of toxic alkaloids in solanaceous plants,
CC particularly potato but also tomato, pepper, aubergine and ditura or to
CC inhibit flowering in potato, lettuce, spinach, cabbage, brussel sprouts,
CC arugula, kale, collards, chard, beet, turnip, sweet potato and turf
CC grass. Also the ribozymes can be used for RNA manipulation in the same
CC way that restriction endonucleases are for DNA, as well as to examine
CC genetic drift and mutations in plants and to detect specific RNA. The
CC ribozymes can be targeted to specific genes or to consensus sequences
CC within a family of related genes, and being catalytic need to be present
CC at only very low concentrations
XX
SQ Sequence 17 BP; 4 A; 4 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 794 TGCCAAGAGCTCT 806
||||||||||||||
Db 15 TGCCAAGAGCTCT 3

RESULT 197
ABT34631/c
ID ABT34631 standard; DNA; 17 BP.
XX
AC ABT34631;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 268.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated

PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 65; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 709 GAGTCCCAGGAGA 721
||||||||||||||
Db 15 GAGTCCCAGGAGA 3

RESULT 198
ADB44659/c
ID ADB44659 standard; DNA; 17 BP.
XX
AC ADB44659;
XX
DT 18-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #4982.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 614; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 709 GAGTCCCAGGAGA 721
||||||||||||||
Db 15 GAGTCCCAGGAGA 3

RESULT 199
AAZ22406
ID AAZ22406 standard; DNA; 18 BP.
XX
AC AAZ22406;
XX
DT 25-NOV-1999 (first entry)
XX
DE Antisense oligonucleotide directed against human RhoB mRNA.
XX
KW Human; RhoB protein; antisense oligonucleotide; disease; RhoB expression;
KW breast cancer; primer; phosphorothioate; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5962672-A.
XX
PD 05-OCT-1999.
XX
PF 18-SEP-1998; 98US-00156979.
XX
PR 18-SEP-1998; 98US-00156979.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Coswert LM;
XX
DR WPI; 1999-571296/48.
XX
PT Antisense inhibition of the gene encoding RhoB, useful for treating
PT diseases associated with RhoB expression e.g. breast cancer.
XX
PS Example 15; Col 27; 24pp; English.
XX
CC AAZ22392-Z22431 represent antisense oligonucleotides, which are 8-30
CC nucleotides in length, and are targeted to the gene encoding human RhoB.
CC The antisense oligonucleotides may be useful for treating diseases

```
CC   associated with the expression of RhoB, such as breast cancer. They may
CC   also have research and diagnostic applications
XX
SQ   Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        702 CTCCAGCGAGTCC 714
              |||||||||||||
Db          6 CTCCAGCGAGTCC 18


RESULT 200
AAX57206/c
ID   AAX57206 standard; DNA; 18 BP.
XX
AC   AAX57206;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Cysteine noose library SCFV JH region primer.
XX
KW   Cysteine noose; antibody variable domain; CDR; cytokine; agonist;
KW   complementarity determining region; antagonist; mimetic; antigen; primer;
KW   MIP-1 alpha receptor; treatment; HIV infection; CDR3; anti-HIV; ss.
XX
OS   Synthetic.
XX
PN   WO9923222-A1.
XX
PD   14-MAY-1999.
XX
PF   30-OCT-1998;   98WO-GB003255.
XX
PR   31-OCT-1997;   97GB-00023062.
XX
PA   (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY.
XX
PI   Osbourn JK;
XX
DR   WPI; 1999-313343/26.
XX
PT   Cysteine noose antibody libraries and their production.
XX
PS   Example 2; Page 29; 64pp; English.
XX
CC   This invention describes the construction of libraries of antibody
CC   variable domains containing modified complementarity determining regions
CC   (CDRs) carrying a cysteine noose and which have cytokine agonist and
CC   antagonist mechanisms of action. The method of the invention can be used
CC   to obtain peptide ligand mimetics capable of binding a target antigen.
CC   The binding members may also be used to provide agonists or antagonists
CC   of targets such as cytokines. In particular specific binding members for
CC   MIP-1 alpha receptors are useful for treatment of HIV infection and for
CC   in vitro investigation of mechanisms of HIV infection. A selection of
CC   peptide ligand mimetics from CDR3 cysteine noose libraries provide a
CC   means to select a different and potentially more effective population of
CC   peptide ligands than direct display of similar cysteine noose ligands on
CC   the surface of bacteriophage. The products of the invention have anti-HIV
CC   activity
XX
SQ   Sequence 18 BP; 2 A; 5 C; 7 G; 2 T; 0 U; 2 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 18;
  Best Local Similarity   76.5%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        753 CAGGGTCCCTAGGCCTC 769
              ||||||:||: |||| |
Db         18 CAGGGTYCCYTGGCCCC 2


RESULT 201
AAF94659
ID   AAF94659 standard; DNA; 18 BP.
XX
AC   AAF94659;
XX
DT   23-MAY-2001  (first entry)
XX
DE   Rho B antisense phosphorothioate oligonucleotide SEQ ID 83.
XX
KW   Rho; GTP binding protein; phosphorothioate antisense oligonucleotide;
KW   RhoA; RhoB; RhoC; RhoG; Rac 1; cdc42; hyperproliferative condition;
KW   cancer; wound healing; clotting; ischaemia; reperfusion; reoxygenation;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO200115739-A1.
XX
PD   08-MAR-2001.
XX
PF   18-AUG-2000; 2000WO-US022808.
XX
PR   31-AUG-1999;   99US-00387341.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Roberts ML,  Cowsert LM;
XX
DR   WPI; 2001-191677/19.
XX
PT   An antisense compound targeted to a nucleic acid molecule encoding a
PT   member of the human Rho family of small GTP binding proteins useful for
PT   treating e.g. cancer and ischemia.
XX
PS   Example 13; Page 64; 156pp; English.
XX
CC   This invention relates to an antisense compound targeted to a nucleic
CC   acid molecule encoding a member of the human Rho family of small GTP
CC   binding proteins, where the antisense compound inhibits the expression of
CC   the member of the human Rho family. The invention includes antisense
CC   oligonucleotides AAF94580 - AAF94637 which target a RhoA nucleotide
CC   sequence, AAF94645 - AAF94684 which target a RhoB nucleotide sequence,
CC   AAF94686 - AAF94725 which target a RhoC nucleotide sequence, AAF94727 -
CC   AAF94766 which target RhoG nucleotide sequence, AAF94769 - AAF94790 which
CC   target a Rac 1 nucleotide sequence and AAF94795 - AAF94809 which target
CC   cdc42 nucleotide sequence. The antisense compound is useful for treating
CC   hyperproliferative conditions, especially cancer, abnormal wound healing
CC   or clotting conditions and ischaemia/reperfusion or reoxygenation injury.
CC   The compound may also be used to diagnose the above conditions
XX
SQ   Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 13;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        702 CTCCAGCGAGTCC 714
              |||||||||||||
Db          6 CTCCAGCGAGTCC 18


RESULT 202
AAH47596/c
ID   AAH47596 standard; DNA; 18 BP.
XX
AC   AAH47596;
XX
DT   30-NOV-2001  (first entry)
XX
DE   Human Her-3 mRNA inhibiting antisense oligo ISIS # 19611.
XX
```

KW Her-3; epidermal growth factor; EGF; receptor/tyrosine kinase; human;
KW antiinflammatory; cytostatic; antibacterial; antisense; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6277640-B1.
XX
PD 21-AUG-2001.
XX
PF 31-JUL-2000; 2000US-00630706.
XX
PR 31-JUL-2000; 2000US-00630706.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowsert LM;
XX
DR WPI; 2001-535134/59.
XX
PT Antisense compounds capable of modulating expression of human Her-3,
PT member of epidermal growth factor family of receptor/tyrosine kinases,
PT useful for preventing or delaying infection, inflammation or tumor
PT formation.
XX
PS Example 15; Col 43-44; 49pp; English.
XX
CC The invention provides antisense compounds capable of inhibiting the
CC expression of human Her-3, a member of epidermal growth factor (EGF)
CC family of receptor/tyrosine kinases. The antisense oligonucleotides are
CC useful for inhibiting the expression of Her-3 in cells or tissues. They
CC are commonly used as research reagents and in diagnostics for example, to
CC elucidate the function of particular genes. The antisense compounds are
CC also useful for distinguishing between functions of various members of a
CC biological pathway and for research use. They are also utilized for
CC diagnostics, therapeutics, prophylaxis and in kits. They are useful
CC prophylactically, e.g. to prevent or delay infection, inflammation or
CC tumor formation. Sequences AAH47532-47615 represent chimeric antisense
CC phosphorothioate oligonucleotides having 2'-MOE wings and a deoxy gap,
CC used for the inhibition of Her-3 mRNA expression
XX
SQ Sequence 18 BP; 3 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 13; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 863 CCAGTTGGAACAC 875
||||||||||||
Db 13 CCAGTTGGAACAC 1

RESULT 203
AAQ13910/c
ID AAQ13910 standard; DNA; 16 BP.
XX
AC AAQ13910;
XX
DT 25-MAR-2003 (revised)
DT 05-NOV-1991 (first entry)
XX
DE Probe YZ28 to N-ras codon 13.
XX
KW ras; point mutation; oncogenesis; PCR; tumour; ss.
XX
OS Synthetic.
XX
PN WO9112343-A.
XX
PD 22-AUG-1991.
XX
PF 07-FEB-1990; 90US-00477260.
XX
PR 07-FEB-1990; 90US-00477260.
XX
PA (CETU) CETUS CORP.
XX
PI Mccormick FP, Lyons JF;
XX
DR WPI; 1991-267154/36.
XX
PT Method for detection of point mutation(s) in nucleic acid segments -
PT where segments encode GTP binding protein or sub-unit and method involves
PT amplification followed by sequence-specific probe hybridisation.
XX
PS Example; Page 57; 69pp; English.
XX
CC This probe corresponds to the sequence around codon 13 of the ras p21
CC gene. It is one of 63 probes which are of use in detecting point
CC mutations in nucleic acid sequences encoding ras proteins, specifically
CC at positions 12, 13 and 61, three potentially oncogenic sites. See
CC AAQ13900-Q13962. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 16 BP; 3 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 1.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 528 TCCCAACATCCTCTGC 543
|||||||||| ||||
Db 16 TCCCAACATCACCTGC 1

RESULT 204
AAQ13904/c
ID AAQ13904 standard; DNA; 16 BP.
XX
AC AAQ13904;
XX
DT 25-MAR-2003 (revised)
DT 05-NOV-1991 (first entry)
XX
DE Probe YZ2 to N-ras codon 12.
XX
KW ras; point mutation; oncogenesis; PCR; tumour; ss.
XX
OS Synthetic.
XX
PN WO9112343-A.
XX
PD 22-AUG-1991.
XX
PF 07-FEB-1990; 90US-00477260.
XX
PR 07-FEB-1990; 90US-00477260.
XX
PA (CETU) CETUS CORP.
XX
PI Mccormick FP, Lyons JF;
XX
DR WPI; 1991-267154/36.
XX
PT Method for detection of point mutation(s) in nucleic acid segments -
PT where segments encode GTP binding protein or sub-unit and method involves
PT amplification followed by sequence-specific probe hybridisation.
XX
PS Example; Page 57; 69pp; English.
XX
CC This probe corresponds to the sequence around codon 12 of the ras p21
CC gene. It is one of 63 probes which are of use in detecting point
CC mutations in nucleic acid sequences encoding ras proteins, specifically
CC at positions 12, 13 and 61, three potentially oncogenic sites. See
CC AAQ13900-Q13962. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 16 BP; 3 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

```
  Query Match             3.2%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        530 CCAACATCCTCTGCTC 545
              |||||| | |||||||
Db         16 CCAACACCATCTGCTC 1


RESULT 205
AAQ29775/c
ID   AAQ29775 standard; DNA; 16 BP.
XX
AC   AAQ29775;
XX
DT   25-MAR-2003  (revised)
DT   18-MAR-1993  (first entry)
XX
DE   5' amidated probe N-RAS 12 Asp for Ras.
XX
KW   hybridisation reagent; reverse dot blot analysis; diagnosis; testing;
KW   cystic fibrosis; RAS oncogene mutations; cytochrome P450; systems;
KW   chromosomal translations; ALL; AML; CML; HLA typing; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1
FT                   /*tag=  a
FT                   /note= "has 5' amino gp for attachment to membra"
XX
PN   EP511559-A1.
XX
PD   04-NOV-1992.
XX
PF   16-APR-1992;   92EP-00106603.
XX
PR   30-APR-1991;   91US-00694226.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Kawasaki ES,  Levenson CH,  Will SG,  Zhang Y;
XX
DR   WPI; 1992-367416/45.
XX
PT   Hybridisation reagent for reverse dot blot analysis - comprises oligo-
PT   nucleotide probe attached to nylon membrane of high carboxyl content via
PT   amide bonds.
XX
PS   Claim 1; Page 3; 17pp; English.
XX
CC   This sequence represents an oligonucleotide probe for the RAS oncogene
CC   used to illustrate a novel hybridisation reagent. The method involves
CC   attaching a linker and spacer arm to the 5' end of the probe for
CC   attachment to a nylon membrane by an amide bond. Attachment by a 5' amino
CC   gp. improves hybridisation efficiency of the probe compared with
CC   attachment via heat treatment or UV irradiation. The method is simple
CC   reproducible and very sensitive (less than 0.1 picomol per spot provides
CC   strong hybridisation signal when used for dot-blot analysis). (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 3 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        530 CCAACATCCTCTGCTC 545
              |||||| | |||||||
Db         16 CCAACACCATCTGCTC 1


RESULT 206
AAQ57220/c
ID   AAQ57220 standard; mRNA; 17 BP.
XX
AC   AAQ57220;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule stromelysin mRNA target sequence.
XX
KW   Specific; cleavage; target RNA; protein; prophylaxis; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
KW   asthma; inflammatory diseases; restenosis; cardiovascular condition;
KW   hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 18; 65pp; English.
XX
CC   This is a stromelysin mRNA target sequence (nucleotide no. 725) of an
CC   enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of osteoarthritis or other pathological
CC   conditions which are mediated by metalloproteinase activation. The concn.
CC   of the ribozyme necessary to effect a therapeutic treatment is lower than
CC   that of an antisense oligonucleotide and the specificity of action is
CC   higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 17 BP; 6 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        815 TCAGGGTTGGCTGTGT 830
              |||| |||||||| ||
Db         17 TCAGTGTTGGCTGAGT 2


RESULT 207
AAQ93477/c
ID   AAQ93477 standard; RNA; 17 BP.
XX
AC   AAQ93477;
XX
DT   25-MAR-2003  (revised)
DT   06-DEC-1995  (first entry)
XX
DE   Hammerhead ribozyme target sequence #16.
XX
KW   Hammerhead ribozyme motif; arthritis; cancer; angiogenesis; hairpin;
```

KW hepatitis delta virus; group 1 intron; RNAse P RNA; stromelysin; ss.
XX
OS Synthetic.
XX
PN WO9513380-A2.
XX
PD 18-MAY-1995.
XX
PF 10-NOV-1994; 94WO-US013129.
XX
PR 12-NOV-1993; 93US-00152487.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Draper KG, Pavco P, Mcswiggen J, Gustofson J;
XX
DR WPI; 1995-194099/25.
XX
PT New enzymatic RNA molecules - which cleave mRNA of a gene encoding a
PT matrix metalloproteinase, for treating arthritis, cancer or angiogenesis.
XX
PS Disclosure; Page 18; 70pp; English.
XX
CC The sequences AAQ93462-Q93494 are examples of target cleavage sequences
CC for a hammerhead ribozyme with sequence motif AAQ90453. A ribozyme, pref.
CC hammerhead, hairpin, hepatitis delta virus, group 1 intron or RNAse P RNA
CC motif can be used in a composition for the treatment of arthritis, cancer
CC or angiogenesis. The ribozyme comprises between 5-45 bases complementary
CC to the target mRNA. The ribozymes (see AAQ93830-51 for examples) were
CC synthesised based on putative stromelysin mRNA target cleavage sequences
CC (AAQ93496-Q93829). (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 815 TCAGGGTTGGCTGTGT 830
|||| |||||||| ||
Db 17 TCAGTGTTGGCTGAGT 2

RESULT 208
AAX63384/c
ID AAX63384 standard; RNA; 17 BP.
XX
AC AAX63384;
XX
DT 20-JUL-1999 (first entry)
XX
DE Human stromelysin hammerhead target SEQ ID NO:16.
XX
KW Arthritic condition; graft tolerance; immune response; target; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9618736-A2.
XX
PD 20-JUN-1996.
XX
PF 22-NOV-1995; 95WO-US015516.
XX
PR 13-DEC-1994; 94US-00354920.
PR 23-DEC-1994; 94US-00363253.
PR 23-DEC-1994; 94US-00363254.
PR 17-FEB-1995; 95US-00390850.
PR 20-APR-1995; 95US-00426124.
PR 02-MAY-1995; 95US-00432874.
PR 04-MAY-1995; 95US-00434509.
PR 07-JUL-1995; 95US-0000951P.
PR 07-JUL-1995; 95US-0000974P.
PR 07-AUG-1995; 95US-00512861.
PR 05-OCT-1995; 95US-00541365.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
PI Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
DR WPI; 1996-300653/30.
XX
PT Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of
PT auto-immune diseases.
XX
PS Example 1; Page 139; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention
XX
SQ Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 815 TCAGGGTTGGCTGTGT 830
|||| |||||||| ||
Db 17 TCAGTGTTGGCTGAGT 2

RESULT 209
AAT59750/c
ID AAT59750 standard; DNA; 17 BP.
XX
AC AAT59750;
XX
DT 18-APR-1997 (first entry)
XX
DE Probe DHOG-57 for omega-conotoxin.
XX
KW Omega-conotoxin; conus; Conus magus; alpha-conotoxin; mu-conotoxin;
KW nicotinic acetylcholine receptor; venom; skeletal muscle; inhibitor;
KW sodium ion channel; presynaptic neuronal calcium ion channel; therapy;
KW P-like subtype; N-type channel; respiratory rhythm; respiratory control;
KW neural developmental syndrome; respiratory crisis; probe;
KW Lambert-Eaton myasthenic syndrome; ss.
XX
OS Synthetic.
XX
PN US5591821-A.
XX
PD 07-JAN-1997.
XX

```
PF   16-JUL-1993;   93US-00092215.
XX
PR   16-JUL-1993;   93US-00092215.
XX
PA   (UTAH ) UNIV UTAH.
XX
PI   Monje VD,  Imperial JS,  Olivera BM,  Hillyard DR;
XX
DR   WPI; 1997-086679/08.
XX
PT   New omega-conotoxin peptide(s) - which target P-type and N-type calcium
PT   ion channels, used for distinguishing calcium channels or for diagnosis.
XX
PS   Example 1; Col 11; 21pp; English.
XX
CC   This sequence represents a probe for the omega-conotoxins of Conus magus.
CC   This sequence was based on a fragment of the conotoxins MVIIA and MVIIB,
CC   to isolate the MVIIC conotoxins of the invention (see AAW12800-W12804).
CC   Conus venom contains three types of disulphide rich peptides, these are
CC   the alpha-conotoxins, mu-conotoxins and omega-conotoxins. The alpha-
CC   conotoxins target and block the nicotinic acetylcholine receptors, the mu
CC   -conotoxins target and block the skeletal muscle sodium ion channels, and
CC   the omega-conotoxins target and block the presynaptic neuronal calcium
CC   ion channels. The omega-conotoxin peptides of the invention can target P-
CC   like subtypes of calcium ion channels, as well as the N-type channels
CC   (distinguishing them from previously known omega-conotoxins). The peptide
CC   sequences can also be used for distinguishing the types of calcium ion
CC   channels. The presence or absence of sites for the peptides can be
CC   determined in tissue sections, thereby characterising calcium ion channel
CC   expressing cells into various types. As the conotoxin peptides affect the
CC   control of respiratory rhythms in vivo, they can be used to evaluate
CC   abnormalities in respiratory control which are particularly severe in the
CC   neonatal period. The peptides can also be used for assessing neural
CC   developmental syndromes that result in respiratory crisis, and can be
CC   used to diagnose the Lambert-Eaton myasthenic syndrome
XX
SQ   Sequence 17 BP; 6 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        727 TCTGGTCATAGGACTT 742
              ||  ||||||||||||
Db         17 TCATGTCATAGGACTT 2


RESULT 210
AAV97942
ID   AAV97942 standard; RNA; 17 BP.
XX
AC   AAV97942;
XX
DT   17-MAR-1999  (first entry)
XX
DE   Human EGF-R target sequence nucleotide position 5149.
XX
KW   Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW   hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW   cancer; genetic drift; detection; mutation; ss.
XX
OS   Homo sapiens.
XX
PN   WO9833893-A2.
XX
PD   06-AUG-1998.
XX
PF   14-JAN-1998;   98WO-US000730.
XX
PR   31-JAN-1997;   97US-0036476P.
PR   04-DEC-1997;   97US-00985162.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (UYAS-) UNIV ASTON.
XX
PI   Akhtar S,  Fell P,  Mcswiggen JA;
XX
DR   WPI; 1998-437449/37.
XX
PT   Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT   growth factor receptor, useful for inhibiting cell proliferation and for
PT   treating cancers.
XX
PS   Claim 5; Page 83; 109pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules (NAMs)
CC   which specifically cleave RNA derived from an epidermal growth factor
CC   receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC   represent specifically claimed target sequence from human EGF-R. AAV98044
CC   to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC   hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC   cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC   expression levels e.g. to inhibit cell proliferation in the prevention or
CC   treatment of cancers. The NAMs can also be used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of EGF-R RNA in a cell
XX
SQ   Sequence 17 BP; 6 A; 4 C; 1 G; 0 T; 6 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   56.2%;  Pred. No. 1.9e+02;
  Matches    9;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        521 AATACTTTCCCAACAT 536
              ||: |:::| |||||:
Db          1 AAUGCUUUCACAACAU 16


RESULT 211
AAV97941
ID   AAV97941 standard; RNA; 17 BP.
XX
AC   AAV97941;
XX
DT   17-MAR-1999  (first entry)
XX
DE   Human EGF-R target sequence nucleotide position 5148.
XX
KW   Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW   hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW   cancer; genetic drift; detection; mutation; ss.
XX
OS   Homo sapiens.
XX
PN   WO9833893-A2.
XX
PD   06-AUG-1998.
XX
PF   14-JAN-1998;   98WO-US000730.
XX
PR   31-JAN-1997;   97US-0036476P.
PR   04-DEC-1997;   97US-00985162.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (UYAS-) UNIV ASTON.
XX
PI   Akhtar S,  Fell P,  Mcswiggen JA;
XX
DR   WPI; 1998-437449/37.
XX
PT   Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT   growth factor receptor, useful for inhibiting cell proliferation and for
PT   treating cancers.
XX
PS   Claim 5; Page 83; 109pp; English.
XX
```

CC The present invention describes enzymatic nucleic acid molecules (NAMs)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMs can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
SQ Sequence 17 BP; 6 A; 4 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 56.2%; Pred. No. 1.9e+02;
Matches 9; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 521 AATACTTTCCCAACAT 536
||: |:::| |||||:
Db 2 AAUGCUUUCACAACAU 17

RESULT 212
AAA22631
ID AAA22631 standard; RNA; 17 BP.
XX
AC AAA22631;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5857.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 54; Page 232; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 2 A; 8 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 68.8%; Pred. No. 1.9e+02;
Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 537 CCTCTGCTCCTAGGCC 552
||:|:||:|| ||| |
Db 1 CCUCUGCUCCCAGGGC 16

RESULT 213
AAA18464
ID AAA18464 standard; RNA; 17 BP.
XX
AC AAA18464;
XX
DT 19-JUN-2000 (first entry)
XX
DE Human TIE-2 substrate sequence SEQ ID NO:1690.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 56; Page 96; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to

CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 4 A; 2 C; 9 G; 0 T; 2 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 1.9e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy        707 GCGAGTCCCAGGAGAG 722
              ||||| | |||||||
Db          2 GCGAGUUCGAGGAGAG 17
```

RESULT 214
AAA25760
ID AAA25760 standard; DNA; 17 BP.
XX
AC AAA25760;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2258.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
PR 23-JUN-1998; 98US-00103636.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
PT New nucleic acids that interact, and optionally cleave, target sequences,
PT used to treat cancer.
XX
PS Claim 77; Page 89; 148pp; English.
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA24748 to AAA25992 represent their corresponding target sequences.
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC sequences, and AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 6 A; 4 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        517 TACCAATACTTTCCCA 532
              ||| |||||||||| |
Db          2 TACAAATACTTTCCTA 17
```

RESULT 215
AAA25680
ID AAA25680 standard; DNA; 17 BP.
XX
AC AAA25680;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2178.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
PR 23-JUN-1998; 98US-00103636.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
PT New nucleic acids that interact, and optionally cleave, target sequences,
PT used to treat cancer.
XX
PS Claim 77; Page 87; 148pp; English.
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic

```
CC   nucleic acid (A') that modulates expression of the oestrogen receptor
CC   gene, are used to treat cancer (particularly of breast or endometrium),
CC   in vivo or by transforming cells ex vivo and implanting treated cells, or
CC   for other conditions associated with levels of oestrogen receptor.
CC   Because of the high selectivity for targeted RNA, (A) can also be used to
CC   correlate inhibition of gene expression with alterations in phenotype,
CC   particularly for identification of therapeutic targets, and as research
CC   reagents (for RNA, in the same way that restriction endonucleases are
CC   used with DNA). The combination of modifications in (A) improves
CC   resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC   AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC   AAA24748 to AAA25992 represent their corresponding target sequences.
CC   AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC   sequences, and AAA26107 to AAA26218 represent their corresponding target
CC   sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC   antisense oligonucleotides used in the exemplification of the present
CC   invention
XX
SQ   Sequence 17 BP; 0 A; 3 C; 4 G; 10 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        823 GGCTGTGTCTCTTTTC 838
              | |||||| |||||||
Db          1 GTCTGTGTTTCTTTTC 16


RESULT 216
AAC72321
ID   AAC72321 standard; DNA; 17 BP.
XX
AC   AAC72321;
XX
DT   09-FEB-2001  (first entry)
XX
DE   Single nucleotide polymorphism PCR primer #1434.
XX
KW   Single nucleotide polymorphism; SNP; human; genetic disease;
KW   disease susceptibility; cardiovascular system; endocrine system;
KW   neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200058519-A2.
XX
PD   05-OCT-2000.
XX
PF   30-MAR-2000; 2000WO-US008440.
XX
PR   31-MAR-1999;   99US-0127248P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Altshuler D,  Cargill M,  Daley GQ,  Ireland JS,  Lander ES;
PI   Lipshutz RJ,  Patil N,  Sklar P;
XX
DR   WPI; 2000-611722/58.
XX
PT   Nucleic acid selected from one of 106 genes comprising single nucleotide
PT   polymorphisms, allele-specific oligonucleotides to the genes are useful
PT   for phenotypic correlations, forensics, paternity testing, medicine and
PT   genetic analysis.
XX
PS   Claim 8; Fig 5; 214pp; English.
XX
CC   The present invention is concerned with a number of human single
CC   nucleotide polymorphisms (SNPs) which the inventors identified in human
CC   genes. These SNPs can be used in disease diagnosis and prediction of an
CC   individual's susceptibility to disease, in forensic and paternity testing
CC   and in genetic mapping. In particular, the SNPs of the invention can be
CC   used to diagnose susceptibility to diseases of the cardiovascular,
CC   endocrine and neurological systems, such as coronary artery disease,
CC   schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC   diseases
XX
SQ   Sequence 17 BP; 4 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        709 GAGTCCCAGGAGAGTG 724
              | | ||||||||||||
Db          2 GGGGCCCAGGAGAGTG 17


RESULT 217
AAC72312
ID   AAC72312 standard; DNA; 17 BP.
XX
AC   AAC72312;
XX
DT   09-FEB-2001  (first entry)
XX
DE   Single nucleotide polymorphism PCR primer #1428.
XX
KW   Single nucleotide polymorphism; SNP; human; genetic disease;
KW   disease susceptibility; cardiovascular system; endocrine system;
KW   neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200058519-A2.
XX
PD   05-OCT-2000.
XX
PF   30-MAR-2000; 2000WO-US008440.
XX
PR   31-MAR-1999;   99US-0127248P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Altshuler D,  Cargill M,  Daley GQ,  Ireland JS,  Lander ES;
PI   Lipshutz RJ,  Patil N,  Sklar P;
XX
DR   WPI; 2000-611722/58.
XX
PT   Nucleic acid selected from one of 106 genes comprising single nucleotide
PT   polymorphisms, allele-specific oligonucleotides to the genes are useful
PT   for phenotypic correlations, forensics, paternity testing, medicine and
PT   genetic analysis.
XX
PS   Claim 8; Fig 5; 214pp; English.
XX
CC   The present invention is concerned with a number of human single
CC   nucleotide polymorphisms (SNPs) which the inventors identified in human
CC   genes. These SNPs can be used in disease diagnosis and prediction of an
CC   individual's susceptibility to disease, in forensic and paternity testing
CC   and in genetic mapping. In particular, the SNPs of the invention can be
CC   used to diagnose susceptibility to diseases of the cardiovascular,
CC   endocrine and neurological systems, such as coronary artery disease,
CC   schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC   diseases
XX
SQ   Sequence 17 BP; 4 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        709 GAGTCCCAGGAGAGTG 724
              | | ||||||||||||
```

```
Db          2 GGGGCCCAGGAGAGTG 17


RESULT 218
AAC72297
ID   AAC72297 standard; DNA; 17 BP.
XX
AC   AAC72297;
XX
DT   09-FEB-2001  (first entry)
XX
DE   Single nucleotide polymorphism PCR primer #1418.
XX
KW   Single nucleotide polymorphism; SNP; human; genetic disease;
KW   disease susceptibility; cardiovascular system; endocrine system;
KW   neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200058519-A2.
XX
PD   05-OCT-2000.
XX
PF   30-MAR-2000; 2000WO-US008440.
XX
PR   31-MAR-1999;   99US-0127248P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Altshuler D,  Cargill M,  Daley GQ,  Ireland JS,  Lander ES;
PI   Lipshutz RJ,  Patil N,  Sklar P;
XX
DR   WPI; 2000-611722/58.
XX
PT   Nucleic acid selected from one of 106 genes comprising single nucleotide
PT   polymorphisms, allele-specific oligonucleotides to the genes are useful
PT   for phenotypic correlations, forensics, paternity testing, medicine and
PT   genetic analysis.
XX
PS   Claim 8; Fig 5; 214pp; English.
XX
CC   The present invention is concerned with a number of human single
CC   nucleotide polymorphisms (SNPs) which the inventors identified in human
CC   genes. These SNPs can be used in disease diagnosis and prediction of an
CC   individual's susceptibility to disease, in forensic and paternity testing
CC   and in genetic mapping. In particular, the SNPs of the invention can be
CC   used to diagnose susceptibility to diseases of the cardiovascular,
CC   endocrine and neurological systems, such as coronary artery disease,
CC   schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC   diseases
XX
SQ   Sequence 17 BP; 4 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        709 GAGTCCCAGGAGAGTG 724
              | | ||||||||||||
Db          2 GGGGCCCAGGAGAGTG 17


RESULT 219
AAF01879/c
ID   AAF01879 standard; DNA; 17 BP.
XX
AC   AAF01879;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #174.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 59; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 0 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        678 GGACCCCCAGGGCCAC 693
              ||||||| ||||| ||
Db         16 GGACCCCGAGGGCGAC 1


RESULT 220
AAH95403/c
ID   AAH95403 standard; RNA; 17 BP.
XX
AC   AAH95403;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human Chk1 ribozyme substrate SEQ ID NO: 828.
XX
KW   Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
KW   RNA cleavage; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157206-A2.
XX
PD   09-AUG-2001.
XX
PF   02-FEB-2001; 2001WO-US003504.
XX
PR   03-FEB-2000; 2000US-0179983P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (FATT/) FATTAEY A R.
XX
PI   Fattaey AR,  Jarvis T,  Mcswiggen J,  Booher RN,  Holman PS;
XX
```

DR WPI; 2001-496922/54.
XX
PT Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
PT molecules, which downregulates expression of a checkpoint kinase-1 gene,
PT useful for treating colorectal, lung, breast or prostate cancers.
XX
PS Claim 4; Page 70; 115pp; English.
XX
CC The present invention provides nucleic acid molecules capable of
CC downregulating the expression of the human checkpoint kinase-1 (Chk1)
CC gene. These may be antisense or ribozyme sequences, and are useful in the
CC treatment of diseases associated with conditions affected by Chk1 levels,
CC including cancer. The present sequence is an oligonucleotide described in
CC the exemplification of the invention
XX
SQ Sequence 17 BP; 4 A; 1 C; 7 G; 0 T; 5 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        796 CCAAGAGCTCTCCTCC 811
              | || ||||||||||
Db         16 CAAAAAGCTCTCCTCC 1
```

RESULT 221
ABK03560/c
ID ABK03560 standard; RNA; 17 BP.
XX
AC ABK03560;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 DNAzyme #14.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 159; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a DNAzyme molecule of the invention
XX
SQ Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        844 TGAAGACAGCGTCCTG 859
              |||||||| | |||||
Db         17 TGAAGACATCCTCCTG 2
```

RESULT 222
ABK03697/c
ID ABK03697 standard; RNA; 17 BP.
XX
AC ABK03697;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Amberzyme #46.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.

XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 167; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an amberzyme molecule of the invention
XX
SQ Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 548 AGGCCTCCCCAGCGAG 563
| |||||||||| |||
Db 16 ATGCCTCCCCAGAGAG 1

RESULT 223
ABK02513/c
ID ABK02513 standard; RNA; 17 BP.
XX
AC ABK02513;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Amberzyme #185.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 134; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to

CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an amberzyme molecule of the invention
XX
SQ Sequence 17 BP; 13 A; 0 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 581 CTTTTGTTCTGTTTTT 596
||||| |||| |||||
Db 17 CTTTTCTTCTATTTTT 2

RESULT 224
ABK03329/c
ID ABK03329 standard; RNA; 17 BP.
XX
AC ABK03329;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Inozyme #280.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 150; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 6 A; 5 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 617 TCTGCCTGGTTCCTGA 632
||| ||||||| ||||
Db 16 TCTCCCTGGTTGCTGA 1

RESULT 225
ABK03696/c
ID ABK03696 standard; RNA; 17 BP.
XX
AC ABK03696;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Amberzyme #45.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX

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PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 30; Page 167; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is an amberzyme molecule of the invention
XX
SQ   Sequence 17 BP; 2 A; 5 C; 6 G; 0 T; 4 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        548 AGGCCTCCCCAGCGAG 563
              | |||||||||| |||
Db         17 ATGCCTCCCCAGAGAG 2


RESULT 226
AAH47420
ID   AAH47420 standard; DNA; 17 BP.
XX
AC   AAH47420;
XX
DT   30-NOV-2001  (first entry)
XX
DE   XPD gene exon 23 amplifying primer.
XX
KW   XRCC3; XPF; melanoma; genotyping; DNA repair gene; XPD; PCR primer;
KW   polymorphism; ss.
XX
OS   Homo sapiens.
XX
PN   WO200162964-A2.
XX
PD   30-AUG-2001.
XX
PF   22-FEB-2001; 2001WO-GB000753.
XX
PR   22-FEB-2000; 2000GB-00004193.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Winsey S,  Haldar N,  Wojnarowska F,  Welsh K;
XX
DR   WPI; 2001-557711/62.
XX
PT   Determining the susceptibility of an individual to malignant melanoma,
PT   involves screening the genome of the individual for the presence or
PT   absence of one or more polymorphic variants of the XRCC3 gene.
XX
PS   Example; Page 14; 35pp; English.
XX
CC   The invention relates to a method for determining whether an individual
CC   is likely to be susceptible to malignant melanoma, and determining the
CC   genetic basis for the melanoma in an individual. The method involves
CC   screening the genome of the individual for the presence or absence of one
CC   or more polymorphic variants of the XRCC3 gene. Sequences AAH47412-420
CC   represent PCR primers used in a genotyping assay of a candidate DNA
CC   repair gene XPD
XX
SQ   Sequence 17 BP; 3 A; 8 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        677 CGGACCCCCAGGGCCA 692
              ||||||| ||| ||||
Db          1 CGGACCCTCAGCGCCA 16


RESULT 227
ABL92157
ID   ABL92157 standard; cDNA; 17 BP.
XX
AC   ABL92157;
XX
DT   30-MAY-2002  (first entry)
XX
DE   Long human Tumour Endothelial Marker SEQ ID NO 323.
XX
KW   Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic;
KW   normal endothelial marker; pan-endothelial marker; immunostimulant;
KW   antiangiogenic; tumour; neoangiogenesis; vascularised tumour;
KW   polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis;
KW   psoriasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200210217-A2.
XX
PD   07-FEB-2002.
XX
PF   01-AUG-2001; 2001WO-US024031.
XX
PR   02-AUG-2000; 2000US-0222599P.
PR   11-AUG-2000; 2000US-0224360P.
PR   11-APR-2001; 2001US-0282850P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
```

```
XX
PI   St Croix B,  Kinzler KW,  Vogelstein B;
XX
DR   WPI; 2002-291856/33.
XX
PT   An isolated molecule comprising an antibody variable region which
PT   specifically binds to an extracellular domain of a tumor endothelial
PT   marker (TEM) protein, useful for inhibiting tumor growth.
XX
PS   Disclosure; Page 319; 331pp; English.
XX
CC   The invention relates to an isolated molecule comprising an antibody
CC   variable region which specifically binds to an extracellular domain of a
CC   tumour endothelial marker (TEM) protein selected from ABB90732, ABB90740,
CC   ABB90749, ABB90750 and ABB90769. The antibodies which bind to TEM
CC   proteins have cytostatic, immunostimulant and antiangiogenic activity.
CC   They are useful for inhibiting tumour growth, neoangiogenesis in subjects
CC   bearing a vascularised tumour, polycystic kidney disease, diabetic
CC   retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM
CC   genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789)
CC   are disclosed, as are marker oligonucleotide sequences: tumour
CC   endothelial markers (TEM) ABL91996-ABL92041 and ABL92143-ABL92191; normal
CC   endothelial markers (NEM) ABL92042-ABL92074; and pan-endothelial markers
CC   (PEM) ABL91903-ABL91995. The present sequence is that of an
CC   oligonucleotide marker useful to the invention
XX
SQ   Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        706 AGCGAGTCCCAGGAGA 721
              || ||| |||||||||
Db          2 AGTGAGACCCAGGAGA 17


RESULT 228
ABN00235
ID   ABN00235 standard; DNA; 17 BP.
XX
AC   ABN00235;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:227.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 227; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        797 CAAGAGCTCTCCTCCA 812
              ||||||| |||| |||
Db          2 CAAGAGCCCTCCACCA 17


RESULT 229
ABN00920
ID   ABN00920 standard; DNA; 17 BP.
XX
AC   ABN00920;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:912.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
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PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 912; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 8 C; 3 G; 0 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        679 GACCCCCAGGGCCACA 694
              ||||||||  | |||||
Db          1 GACCCCCAAGACCACA 16


RESULT 230
ABN09221
ID   ABN09221 standard; DNA; 17 BP.
XX
AC   ABN09221;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9213.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 9213; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        534 CATCCTCTGCTCCTAG 549
              |||||||  ||||| ||
Db          2 CATCCTCAGCTCCCAG 17


RESULT 231
ABN00947
ID   ABN00947 standard; DNA; 17 BP.
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XX
AC   ABN00947;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:939.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 939; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match              3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        675 GGCGGACCCCCAGGGC 690
              ||| || ||||||||||
Db          1 GGCTGAGCCCCAGGGC 16


RESULT 232
ABN00946
ID   ABN00946 standard; DNA; 17 BP.
XX
AC   ABN00946;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:938.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 938; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
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CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        675 GGCGGACCCCCAGGGC 690
              ||| || ||||||||||
Db          2 GGCTGAGCCCCAGGGC 17


RESULT 233
ABN00236
ID   ABN00236 standard; DNA; 17 BP.
XX
AC   ABN00236;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:228.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 228; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        797 CAAGAGCTCTCCTCCA 812
              ||||||| |||| |||
Db          1 CAAGAGCCCTCCACCA 16


RESULT 234
ABN06104
ID   ABN06104 standard; DNA; 17 BP.
XX
AC   ABN06104;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6096.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
```

```
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6096; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCTC 790
              ||| | ||||||||||
Db          2 CTGTGAGCAGCCCCTC 17


RESULT 235
ABN06105
ID   ABN06105 standard; DNA; 17 BP.
XX
AC   ABN06105;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6097.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6097; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCTC 790
              ||| | ||||||||||
Db          1 CTGTGAGCAGCCCCTC 16


RESULT 236
ABN09222
ID   ABN09222 standard; DNA; 17 BP.
XX
AC   ABN09222;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9214.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
```

```
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 9214; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        534 CATCCTCTGCTCCTAG 549
              ||||||| ||||| ||
Db          1 CATCCTCAGCTCCCAG 16


RESULT 237
ABN00918
ID   ABN00918 standard; DNA; 17 BP.
XX
AC   ABN00918;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:910.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 910; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        678 GGACCCCCAGGGCCAC 693
              ||||||||| | ||||
Db          2 GGACCCCCAAGACCAC 17
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RESULT 238
ABK19224
ID   ABK19224 standard; RNA; 17 BP.
XX
AC   ABK19224;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG Amberzyme target sequence Seq ID No 1871.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 123; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 5 A; 6 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   68.8%;  Pred. No. 1.9e+02;
  Matches   11;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        628 CCTGAGAGAGGCTCCT 643
              ||: |||||| |:||:
Db          2 CCUCAGAGAGACUCCU 17


RESULT 239
ABK18752
ID   ABK18752 standard; RNA; 17 BP.
XX
AC   ABK18752;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG DNAzyme target sequence Seq ID No 1399.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 90; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
```

```
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   56.2%;  Pred. No. 1.9e+02;
  Matches    9;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        816 CAGGGTTGGCTGTGTC 831
              |||| ::|||:|: :|
Db          1 CAGGAUUGGCUGUCUC 16


RESULT 240
ABK19169
ID   ABK19169 standard; RNA; 17 BP.
XX
AC   ABK19169;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG Amberzyme target sequence Seq ID No 1816.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 121; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   56.2%;  Pred. No. 1.9e+02;
  Matches    9;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        816 CAGGGTTGGCTGTGTC 831
              |||| ::|||:|: :|
Db          2 CAGGAUUGGCUGUCUC 17


RESULT 241
ABS75089/c
ID   ABS75089 standard; DNA; 17 BP.
XX
AC   ABS75089;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 615.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 156; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
```

```
  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        546 CTAGGCCTCCCCAGCG 561
              ||| |||||||||| |
Db         17 CTATGCCTCCCCAGGG 2


RESULT 242
ABS75091/c
ID   ABS75091 standard; DNA; 17 BP.
XX
AC   ABS75091;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 617.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 156; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 5 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        544 TCCTAGGCCTCCCCAG 559
              | ||| ||||||||||
Db         17 TTCTATGCCTCCCCAG 2


RESULT 243
ABS75090/c
ID   ABS75090 standard; DNA; 17 BP.
XX
AC   ABS75090;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 616.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 156; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        546 CTAGGCCTCCCCAGCG 561
              ||| |||||||||| |
Db         16 CTATGCCTCCCCAGGG 1


RESULT 244
ABS75094/c
ID   ABS75094 standard; DNA; 17 BP.
XX
AC   ABS75094;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 620.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
```

```
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 156; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 5 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        542 GCTCCTAGGCCTCCCC 557
              ||| ||| ||||||||
Db         16 GCTTCTATGCCTCCCC 1


RESULT 245
ABV90003
ID   ABV90003 standard; DNA; 17 BP.
XX
AC   ABV90003;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 716.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 716; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        838 CTTCTCTGAAGACAGC 853
              |||||| | |||||||
Db          1 CTTCTCCGGAGACAGC 16


RESULT 246
ABV90065
ID   ABV90065 standard; DNA; 17 BP.
XX
AC   ABV90065;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 778.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
```

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PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 778; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 2 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        552 CTCCCCAGCGAGCTCC 567
              || |||||| ||||||
Db          1 CTTCCCAGCCAGCTCC 16


RESULT 247
ABV90064
ID   ABV90064 standard; DNA; 17 BP.
XX
AC   ABV90064;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 777.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 777; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        552 CTCCCCAGCGAGCTCC 567
              || |||||| ||||||
Db          2 CTTCCCAGCCAGCTCC 17


RESULT 248
ABV90002
ID   ABV90002 standard; DNA; 17 BP.
XX
AC   ABV90002;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 715.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
```

```
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 715; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        838 CTTCTCTGAAGACAGC 853
              |||||| | |||||||
Db          2 CTTCTCCGGAGACAGC 17


RESULT 249
AAD36054
ID   AAD36054 standard; DNA; 17 BP.
XX
AC   AAD36054;
XX
DT   09-AUG-2002  (first entry)
XX
DE   Human cMLCK DNA amplifying primer 3.
XX
KW   Human; cardiac myosin light chain kinase; cMLCK; tricuspid valve;
KW   cardiac dysfunction; systolic dysfunction; mitral valve prolapse;
KW   diastolic dysfunction; cardiac hypertrophy; tricuspid insufficiency;
KW   coronary heart disease; myocardial infarction; mitral insufficiency;
KW   valvular heart disease; congestive heart failure; mitral valve;
KW   cardiomyopathy; cardiant; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224889-A2.
XX
PD   28-MAR-2002.
XX
PF   12-SEP-2001; 2001WO-US028639.
XX
PR   12-SEP-2000; 2000US-0232246P.
PR   13-SEP-2000; 2000US-0232456P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Epstein ND,  Hassanzadeh S,  Winitsky S,  Davis JS;
XX
DR   WPI; 2002-394135/42.
XX
PT   New isolated cardiac myosin light chain kinase (cMLCK) protein, useful
PT   for identifying cMLCK modulators that are used for treating cardiac
PT   dysfunction e.g. systolic or diastolic dysfunction, myocardial
PT   infarction.
XX
PS   Example 1; Page 31; 105pp; English.
XX
CC   The invention relates to cDNA, protein sequence and genomic structure of
CC   the human cardiac isoform of myosin light chain kinase (cMLCK) and
CC   mutations in cMLCK gene that are associated with cardiac dysfunction. The
CC   invention also relates to methods for identifying agents that modulate
CC   cMLCK activity. cMLCK is useful for detecting enhanced susceptibility of
CC   a subject to cardiac dysfunction. cMLCK is useful for screening for an
CC   agent that modulates its biological activity. The method is useful for
CC   enhancing or preserving cardiac function in a subject having cardiac
CC   dysfunction, and harbouring a mutation in cMLCK allele. The method is
CC   useful for enhancing or preserving cardiac function in a subject having
CC   cardiac dysfunction such as systolic dysfunction, diastolic dysfunction,
CC   cardiac hypertrophy, cardiomyopathy, coronary heart disease, myocardial
CC   infarction, or congestive heart failure, or for preserving cardiac
CC   function, or cardiac dysfunction which comprises valvular heart disease
CC   such as mitral valve disease, tricuspid valve disease, mitral
CC   insufficiency, tricuspid insufficiency, or mitral valve prolapse. The
CC   method is useful for treating cardiac dysfunction, e.g., systolic or
CC   diastolic dysfunction, coronary heart disease, cardiac hypertrophy,
CC   cardiomyopathy, myocardial infarction, or congestive heart failure. The
CC   present sequence is a PCR primer used to amplify human cMLCK DNA
XX
SQ   Sequence 17 BP; 5 A; 8 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        677 CGGACCCCCAGGGCCA 692
              | |||||||||| ||||
Db          2 CAGACCCCCAGAGCCA 17


RESULT 250
ABX72082
ID   ABX72082 standard; DNA; 17 BP.
XX
AC   ABX72082;
XX
DT   12-MAR-2003  (first entry)
XX
DE   Human tumour endothelial marker TEM 13 DNA long tag #1.
XX
KW   Human; endothelial cell; EC; tumour endothelial cell; TEM; NEM;
KW   Tumour endothelial marker; normal endothelial marker; PEM;
KW   pan-endothelial marker; polycystic kidney disease; psoriasis;
KW   diabetic retinopathy; rheumatoid arthritis; tumour angiogenesis;
```

KW neoangiogenesis; immune response; cytostatic; antidiabetic;
KW ophthalmological; antirheumatic; antiarthritic; antipsoriatic; ds.
XX
OS Homo sapiens.
XX
PN WO200283874-A2.
XX
PD 24-OCT-2002.
XX
PF 10-APR-2002; 2002WO-US008253.
XX
PR 11-APR-2001; 2001US-0282850P.
PR 06-FEB-2002; 2002US-0354262P.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Carson-Walter E, St Croix B, Kinzler KW, Vogelstein B;
XX
DR WPI; 2003-093016/08.
XX
PT New purified human transmembrane protein, designated as tumor endothelial
PT marker (TEM) 3, useful for detecting, diagnosing or treating tumors,
PT polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or
PT psoriasis.
XX
PS Disclosure; Page 360; 374pp; English.
XX
CC The present invention relates to a novel method for the isolation of
CC endothelial cells (ECs), and the identification of genes expressed in
CC normal and tumour ECs. Tumour endothelial marker (TEM), normal
CC endothelial marker (NEM), and pan-endothelial marker (PEM) genes are
CC identified in human ECs. The human EC marker proteins and the
CC polynucleotide sequences encoding them are useful for detecting,
CC diagnosing or treating tumours as well as polycystic kidney disease,
CC diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also
CC useful for inhibiting neoangiogenesis or tumour angiogenesis, for
CC inducing an immune response to tumour endothelial cells in a patient, or
CC for identifying candidate drugs for treating tumours. ABX72067-ABX72116
CC represent human TEM DNA tags
XX
SQ Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 706 AGCGAGTCCCAGGAGA 721
|| ||| |||||||||
Db 2 AGTGAGACCCAGGAGA 17

RESULT 251
ABT35485
ID ABT35485 standard; DNA; 17 BP.
XX
AC ABT35485;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 1122.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 164; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 7 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 518 ACCAATACTTTCCCAA 533
| ||||||| ||||||
Db 2 ATCAATACTATCCCAA 17

RESULT 252
ACD65498/c
ID ACD65498 standard; RNA; 17 BP.
XX
AC ACD65498;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #2073.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.

```
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 312; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        765 GCCTCCACTTCTGAGG 780
              |||||| ||| |||||
Db         16 GCCTCCGCTTATGAGG 1


RESULT 253
ACD59037/c
ID   ACD59037 standard; RNA; 17 BP.
XX
AC   ACD59037;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HCV DNAzyme substrate sequence #1119.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 254; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 2 A; 5 C; 6 G; 0 T; 4 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        557 CAGCGAGCTCCTCCCA 572
              |||||||||| || ||
Db         16 CAGCGAGCTCGTCACA 1


RESULT 254
ADB42565
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```
ID   ADB42565 standard; DNA; 17 BP.
XX
AC   ADB42565;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #2888.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 369; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 6 A; 6 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        802 GCTCTCCTCCAACTCA 817
              | |||||| |||||||
Db          1 GATCTCCTACAACTCA 16


RESULT 255
ADE87480
ID   ADE87480 standard; DNA; 17 BP.
XX
AC   ADE87480;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Fowlpox virus Orf1 gene deleted sequence.
XX
KW   fowlpox virus; FPV; virucide; tuberculostatic; protozoacide; antipyretic;
KW   cytostatic; hepatotropic; antibacterial; vaccine; malaria; tuberculosis;
KW   East Coast fever; avipox virus; influenza; hepatitis;
KW   human papilloma virus; tumour; leishmaniasis; listeriosis; theileria;
KW   gene; ds; Orf1.
XX
OS   Fowlpox virus.
XX
PN   WO2003047617-A2.
XX
PD   12-JUN-2003.
XX
PF   02-DEC-2002; 2002WO-GB005411.
XX
PR   30-NOV-2001; 2001GB-00028733.
PR   30-NOV-2001; 2001US-0334649P.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Laidlaw S,  Skinner M,  Hill A,  Gilbert S,  Anderson R;
XX
DR   WPI; 2003-513700/48.
XX
PT   Treating and/or preventing e.g. malaria or tuberculosis, or eliciting an
PT   immune response, comprises administering a priming composition and a
PT   boosting composition containing a non-replicating viral vector in either
PT   order.
XX
PS   Claim 8; Page 87; 302pp; English.
XX
CC   The invention relates to a fowlpox virus (FPV) genome which has
CC   modifications in one or more wild-type FPV genes. The invention further
CC   relates to a novel method for treating and/or preventing a disease in a
CC   subject comprising administering two compositions, each containing a non-
CC   replicating viral vector. At least one of the compositions comprises a
CC   poxvirus vector derived from a fowlpox virus. The novel compositions have
CC   the following activities: virucide, tuberculostatic, protozoacide,
CC   antipyretic, cytostatic, hepatotropic, and antibacterial. The non-
CC   replicating viral vector is useful in a vaccine for an animal,
CC   particularly a mammal such as a primate, specifically human. The priming
CC   or boosting composition, or the kit is useful for manufacturing a
CC   medicament for treating and/or preventing a disease which is, or results
CC   from, a chronic infection such as malaria, tuberculosis or East Coast
CC   fever, or for eliciting a T-cell immune response in a subject. Non-
CC   cultured CEF cells are useful for growing an avipox virus, such as
CC   fowlpox virus. The method or the vaccine may further be used to treat or
CC   prevent influenza, hepatitis, human papilloma virus and other viral
CC   infections, malignancies such as tumours, leishmaniasis, listeriosis, and
CC   theileria. This polynucleotide sequence represents the deleted region of
CC   the Orf1 gene of the fowlpox virus genome of the invention.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        790 CTGGTGCCAAGAGCTC 805
              ||||||| |||| |||
Db          2 CTGGTGCGAAGATCTC 17


RESULT 256
AAT79132/c
ID   AAT79132 standard; DNA; 18 BP.
XX
AC   AAT79132;
XX
```

```
DT   08-OCT-1997  (first entry)
XX
DE   Primer for human serine protease 59 (SP59) cDNA.
XX
KW   Human; colon carcinoma; COLO 201; cell line; serine protease; SP59;
KW   screening; inhibitor; treatment; disease; amplification; primer;
KW   polymerase chain reaction; PCR; ss.
XX
OS   Synthetic.
XX
PN   JP09149790-A.
XX
PD   10-JUN-1997.
XX
PF   24-JUL-1996;   96JP-00212196.
XX
PR   29-SEP-1995;   95JP-00275105.
XX
PA   (SUNR ) SUNTORY LTD.
XX
DR   WPI; 1997-357902/33.
XX
PT   Human colon carcinoma derived serine protease(s) SP59, SP60 and SP67 -
PT   useful to screen for specific inhibitors, e.g. to search for, or study
PT   agent for treatment of various diseases.
XX
PS   Example 4; Page 14; 16pp; Japanese.
XX
CC   The present sequence is a primer for the PCR amplification of the human
CC   colon carcinoma COLO 201 cell line derived serine protease 59 (SP59),
CC   cDNA. SP59 can be used to screen for specific inhibitors, e.g. to search
CC   for, or study an agent for the treatment of various diseases
XX
SQ   Sequence 18 BP; 9 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        612 CTGACTCTGCCTGGTT 627
              |||| ||| |||||||
Db         18 CTGATTCTCCCTGGTT 3


RESULT 257
AAV09937/c
ID   AAV09937 standard; RNA; 18 BP.
XX
AC   AAV09937;
XX
DT   28-JUL-1998  (first entry)
XX
DE   Nucleotide sequence of a fragment 1 of the 25S rRNA.
XX
KW   Small nucleolar RNA; snoRNA; 25S rRNA; D box; conserved motif;
KW   methylation; HIV; pathogenic fungus; inhibition; tumour; ss.
XX
OS   Saccharomyces cerevisiae.
XX
PN   WO9800566-A1.
XX
PD   08-JAN-1998.
XX
PF   27-JUN-1997;   97WO-US011251.
XX
PR   28-JUN-1996;   96US-0020842P.
XX
PA   (UYMA-) UNIV MASSACHUSETTS.
XX
PI   Fournier MJ,  Ni J;
XX
DR   WPI; 1998-086989/08.
XX
PT   Site-specific methylation of 2'-O-hydroxyl group of ribonucleotide(s) -
PT   using modified small nucleolar RNAs, useful to e.g. inhibit tumour or
PT   fungal cell growth or viral replication or to promote RNA stability.
XX
PS   Disclosure; Fig 1B; 32pp; English.
XX
CC   This is the nucleotide sequence 25S rRNA was used in the method of
CC   invention to show methylation in the presence of U18, a small nucleolar
CC   RNA (snoRNA) from Saccharomyces cerevisiae, comprising the D box, a
CC   conserved motif. Methylating of the 2'-O-hydroxyl group of a target
CC   ribonucleotide in a target nucleic acid comprises contact of the target
CC   nucleic acid with a modified small nucleolar RNA (snoRNA) under suitable
CC   conditions for methylation of target ribonucleotide. The target nucleic
CC   acid preferably rRNA or mRNA, or comprises the genome of a pathogen (e.g.
CC   a human immunodeficiency virus or pathogenic fungus) or RNA transcribed
CC   from a pathogen genome. The target ribonucleotide is preferably in an RNA
CC   cleavage site. Site-specific methylation of ribonucleotides in naturally
CC   occurring, altered or introduced genes in humans, other animals, plants
CC   and fungi is possible, allowing many biological processes to be
CC   modulated. The method can be used to modulate e.g. RNA folding,
CC   processing, cleavage and other processes involving sequence-specific
CC   recognition of RNA sequences (e.g. translation), as well as for promoting
CC   RNA stability. It is useful for e.g. stabilising therapeutic antisense
CC   RNAs introduced by gene therapy and modulating gene expression, e.g. by
CC   blocking pre-mRNA splicing. It can be also be used to inhibit cell
CC   growth, tumour or fungal cell growth, as well as viral replication
XX
SQ   Sequence 18 BP; 8 A; 4 C; 5 G; 0 T; 1 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        617 TCTGCCTGGTTCCTGA 632
              | |||||||||||| |
Db         16 TGTGCCTGGTTCCTCA 1


RESULT 258
AAX10086/c
ID   AAX10086 standard; DNA; 18 BP.
XX
AC   AAX10086;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker downstream primer #392.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
```

```
XX
PS   Claim 16; Page 197; 310pp; English.
XX
CC   AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC   isolation of various biallelic polymorphic markers found in the human
CC   genome (represented in AAX10269-X12937). These primers can be used in a
CC   method for determining polymorphic forms in an individual for use in e.g.
CC   forensics, paternity testing or for phenotypic typing for diseases such
CC   as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC   hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 18 BP; 0 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        679 GACCCCCAGGGCCACA 694
              ||||| ||||| ||||
Db         16 GACCCACAGGGACACA 1


RESULT 259
AAX84266
ID   AAX84266 standard; DNA; 18 BP.
XX
AC   AAX84266;
XX
DT   08-SEP-1999  (first entry)
XX
DE   PCR primer for human Nck associated protein 1 coding sequence.
XX
KW   Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
KW   therapy; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9931239-A1.
XX
PD   24-JUN-1999.
XX
PF   14-DEC-1998;   98WO-JP005646.
XX
PR   15-DEC-1997;   97JP-00363183.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
PA   (SAKA/) SAKAKI Y.
XX
PI   Sakaki Y;
XX
DR   WPI; 1999-395181/33.
XX
PT   Protein inhibiting apoptosis, useful in the diagnosis and treatment of
PT   Alzheimer's disease.
XX
PS   Example 1; Page 79; 90pp; Japanese.
XX
CC   This sequence represents a PCR primer used to isolate DNA encoding the
CC   human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
CC   apoptosis. The protein can be used in the investigation, diagnosis and
CC   treatment (e.g. by gene therapy) of Alzheimer's disease
XX
SQ   Sequence 18 BP; 4 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        790 CTGGTGCCAAGAGCTC 805
              ||  ||||||||||||
Db          1 CTCCTGCCAAGAGCTC 16


RESULT 260
AAX76860/c
ID   AAX76860 standard; DNA; 18 BP.
XX
AC   AAX76860;
XX
DT   05-AUG-1999  (first entry)
XX
DE   PCR primer for cloning of T66Bk gene.
XX
KW   Transcription unit; MARK2 kinase; rsk3 kinase; regulatory region; T66Bk;
KW   contraceptive; Responder/Distorter signalling cascade; t-Responder;
KW   PCR primer; ss.
XX
OS   Synthetic.
OS   Mus sp.
XX
PN   WO9925815-A2.
XX
PD   27-MAY-1999.
XX
PF   18-NOV-1998;   98WO-EP007395.
XX
PR   18-NOV-1997;   97EP-00120190.
PR   02-MAR-1998;   98EP-00103596.
XX
PA   (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
PI   Herrmann B,  Koschorz B,  Kispert A;
XX
DR   WPI; 1999-347466/29.
XX
PT   Nucleic acids involved in the Responder phenotype in mice.
XX
PS   Example 7; Page 59; 117pp; English.
XX
CC   This sequence is a PCR primer used in the cloning of the T66Bk gene. The
CC   invention related to a nucleic acid molecule (I) comprising a
CC   transcription unit encoding in its 5' portion a kinase having a homology
CC   to MARK2 kinase and the 3' portion of the nucleotide sequence has a high
CC   homology to rsk3 kinase. Sperm produced by transgenic creatures
CC   containing (I) are useful for production of offspring. T66Bk, its
CC   regulatory region, recombinant DNA, vectors, host cells, antibodies,
CC   etc., are useful for the isolation of receptors on the surface of sperm
CC   recognising attractants of the egg cell for the development and/or
CC   production of contraceptives. They can also be used to identify chemicals
CC   or biological compounds able to trigger the (premature) activation or
CC   inhibition of the Responder/Distorter signalling cascade, or to identify
CC   and isolate receptors and other members of the cascade that bind the
CC   expression products. The methods for detecting the sperm of the
CC   transgenic animal, and selecting against (I) also provide a means for
CC   distorting the transmission ratio of genetic traits by altering genes of
CC   the Responder/Distorter signal cascade other than the t-Responder. They
CC   also allow distortion, to a non-Mendelian ratio, of the transmission of a
CC   genetic trait, i.e. determination of sex, from male mammals to their
CC   offspring by expressing during spermatogenesis/spermiogenesis a gene
CC   involved in sperm motility and/or fertilisation. The genes and proteins
CC   involved in the responder phenotype and Responder/Distorter signalling
CC   cascade, as well as the inventive methods are advantageous in breeding
CC   strategies by allowing for specific selection of genetic traits and in
CC   particular, of sex
```

```
XX
SQ   Sequence 18 BP; 2 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        560 CGAGCTCCTCCCAGAC 575
              | ||||||||||| ||
Db         16 CAAGCTCCTCCCAAAC 1


RESULT 261
AAZ11782
ID   AAZ11782 standard; DNA; 18 BP.
XX
AC   AAZ11782;
XX
DT   23-NOV-1999  (first entry)
XX
DE   Oligonucleotide primer JB660.
XX
KW   internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
KW   primer; detection; plant disease; crop protection; ss.
XX
OS   Synthetic.
OS   Pyrenophora tritici-repentis.
XX
PN   WO9942609-A1.
XX
PD   26-AUG-1999.
XX
PF   18-FEB-1999;   99WO-EP001058.
XX
PR   20-FEB-1998;   98US-00026601.
XX
PA   (NOVS ) NOVARTIS AG.
PA   (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX
PI   Beck JJ;
XX
DR   WPI; 1999-527487/44.
XX
PT   New internal transcribed spacer DNA from fungal pathogens, used as
PT   sources of primers and probes for pathogen detection.
XX
PS   Claim 13; Page 18; 40pp; English.
XX
CC   This primer can be used in the amplification-based detection of a fungal
CC   Internal Transcribed Spacer (ITS) DNA sequence. This sequence was derived
CC   from the ITS sequences, specifically from the regions of the ITS which
CC   exhibit the greatest difference among the fungal pathotypes. This allows
CC   the identification of specific pathogens and provides a method for
CC   detecting them
XX
SQ   Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        707 GCGAGTCCCAGGAGAG 722
              ||||||| | ||||||
Db          2 GCGAGTCTCGGGAGAG 17


RESULT 262
AAA52848/c
ID   AAA52848 standard; DNA; 18 BP.
XX
AC   AAA52848;
XX
DT   15-SEP-2000  (first entry)
XX
DE   Human CD44 antisense oligonucleotide ISIS# 18737.
XX
KW   Human; CD44; cell surface adhesion receptor; cytostatic; antirheumatic;
KW   antiinflammatory; antiarthritic; CD44 antisense inhibition;
KW   hyperproliferative disorder; cancer; inflammatory disorder;
KW   rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200035935-A1.
XX
PD   22-JUN-2000.
XX
PF   14-DEC-1999;   99WO-US029576.
XX
PR   17-DEC-1998;   98US-00213719.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2000-431564/37.
XX
PT   New antisense compound, that inhibits the expression of human cell
PT   surface adhesion receptor CD44, for treating hyperproliferative disorders
PT   and inflammatory conditions, such as cancer and rheumatoid arthritis.
XX
PS   Example 15; Page 76; 105pp; English.
XX
CC   The present sequence is one of a large number of antisense
CC   oligonucleotides designed to target different regions of the human CD44
CC   mRNA. CD44 is a multifunctional human cell surface adhesion receptor. The
CC   oligonucleotides were analysed for effect on CD44 mRNA levels by
CC   quantitative real-time PCR analysis. Antisense oligonucleotides that
CC   inhibit CD44 expression can be used to treat CD44-associated conditions
CC   including hyperproliferative disorders, such as cancer, and inflammatory
CC   conditions, such as rheumatoid arthritis. The antisense compounds
CC   hybridise to CD44 nucleic acids, thus allowing sandwich and other assays
CC   to be easily constructed. Note: The sequence has a phosphorothioate
CC   backbone and may be either an oligodeoxynucleotide or a chimeric
CC   oligonucleotide containing 2'-methoxyethyl (2'-MOE) wings and a deoxy
CC   gap. The ISIS number given above corresponds to the oligodeoxynucleotide
CC   sequence
XX
SQ   Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        566 CCTCCCAGACCAAGAC 581
              | ||||||| |||||
Db         18 CATCCCAGACGAAGAC 3


RESULT 263
AAA52819/c
ID   AAA52819 standard; DNA; 18 BP.
XX
AC   AAA52819;
XX
DT   15-SEP-2000  (first entry)
XX
DE   Human CD44 antisense oligonucleotide ISIS# 18708.
XX
KW   Human; CD44; cell surface adhesion receptor; cytostatic; antirheumatic;
KW   antiinflammatory; antiarthritic; CD44 antisense inhibition;
KW   hyperproliferative disorder; cancer; inflammatory disorder;
KW   rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
```

PN WO200035935-A1.
XX
PD 22-JUN-2000.
XX
PF 14-DEC-1999; 99WO-US029576.
XX
PR 17-DEC-1998; 98US-00213719.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowsert LM;
XX
DR WPI; 2000-431564/37.
XX
PT New antisense compound, that inhibits the expression of human cell
PT surface adhesion receptor CD44, for treating hyperproliferative disorders
PT and inflammatory conditions, such as cancer and rheumatoid arthritis.
XX
PS Example 15; Page 76; 105pp; English.
XX
CC The present sequence is one of a large number of antisense
CC oligonucleotides designed to target different regions of the human CD44
CC mRNA. CD44 is a multifunctional human cell surface adhesion receptor. The
CC oligonucleotides were analysed for effect on CD44 mRNA levels by
CC quantitative real-time PCR analysis. Antisense oligonucleotides that
CC inhibit CD44 expression can be used to treat CD44-associated conditions
CC including hyperproliferative disorders, such as cancer, and inflammatory
CC conditions, such as rheumatoid arthritis. The antisense compounds
CC hybridise to CD44 nucleic acids, thus allowing sandwich and other assays
CC to be easily constructed. Note: The sequence has a phosphorothioate
CC backbone and may be either an oligodeoxynucleotide or a chimeric
CC oligonucleotide containing 2'-methoxyethyl (2'-MOE) wings and a deoxy
CC gap. The ISIS number given above corresponds to the oligodeoxynucleotide
CC sequence
XX
SQ Sequence 18 BP; 4 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 614 GACTCTGCCTGGTTCC 629
||||||||||.||.||
Db 16 GACTCTGCCTCGTGCC 1

RESULT 264
AAZ57722/c
ID AAZ57722 standard; DNA; 18 BP.
XX
AC AAZ57722;
XX
DT 05-APR-2000 (first entry)
XX
DE Human G-alpha-12 antisense inhibitor ISIS# 20711.
XX
KW G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
KW cell growth; metastatic growth; ss; ISIS# 20711.
XX
OS Homo sapiens.
XX
PN US5998206-A.
XX
PD 07-DEC-1999.
XX
PF 23-FEB-1999; 99US-00256496.
XX
PR 23-FEB-1999; 99US-00256496.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Cowsert LM;
XX
DR WPI; 2000-095920/08.
XX
PT Antisense inhibition of human G-alpha-12 expression.
XX
PS Example 15; Col 39; 36pp; English.
XX
CC This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
CC member of the G12/13 subfamily of G-proteins. The primary function of G-
CC alpha-12 is in cell differentiation and growth. The invention relates to
CC antisense compounds which are 8-30 nucleotides long (see AAZ57668-
CC Z57746). The antisense molecules are targeted to the human G-alpha-12
CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The
CC molecules preferably have a modified internucleotide linkage, and at
CC least one modified sugar moiety. The compounds target different regions
CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
CC inhibited by contacting human cells or tissues in vitro with the
CC antisense molecules. The oligonucleotides are used in modulating the
CC function of nucleic acid molecules encoding G-alpha-12, ultimately
CC modulating the amount of G-alpha-12 produced. The antisense compounds can
CC be utilized for diagnostics, therapeutics, prophylaxis and as research
CC agents and kits. They may be useful in the treatment of cancer, and
CC metastatic growth
XX
SQ Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 701 CCTCCAGCGAGTCCCA 716
||||||||||||.|.|
Db 17 CCTCCAGCGAGTACGA 2

RESULT 265
AAZ59776/c
ID AAZ59776 standard; DNA; 18 BP.
XX
AC AAZ59776;
XX
DT 19-APR-2000 (first entry)
XX
DE Human Smad4 phosphorothioate antisense oligonucleotide, SEQ ID NO:35.
XX
KW Smad4; MADH4; DPC4; TGF-beta signalling pathway; transcription factor;
KW expression inhibition; tumour formation; inflammation; antisense; ss.
XX
OS Homo sapiens.
XX
PN US6013787-A.
XX
PD 11-JAN-2000.
XX
PF 23-FEB-1999; 99US-00255888.
XX
PR 23-FEB-1999; 99US-00255888.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cowsert LM;
XX
DR WPI; 2000-126071/11.
XX
PT Antisense inhibition of the human Smad4 gene, useful for diagnosing,
PT preventing and treating conditions associated with Smad4 expression e.g.
PT inflammation.
XX
PS Claim 1; Col 39; 32pp; English.
XX
CC Sequences AAZ49749-Z59788 represent antisense oligonucleotides targetted
CC to the human Smad4 gene, which inhibit its expression. The antisense
CC oligonucleotides were designed to target different regions of the human
CC Smad4 RNA, and were analysed for their effect on Smad4 mRNA levels by

```
CC   quantitative real-time PCR. The Smad proteins are a family of cytosolic
CC   proteins which are involved in TGF-beta superfamily signal transduction.
CC   On ligand binding, TGF-beta superfamily proteins (such as bone
CC   morphogenetic protein (BMP), activin and TGF-betas themselves)
CC   phosphorylate Smad proteins, which then homo- or heterodimerise and
CC   translocate to the nucleus to activate target gene transcription. Smad4
CC   (also known as MADH4 and DPC4) is a shared heterodimerisation partner for
CC   the pathway restricted members of the Smad family (Smad1-3, 5 and MADH6)
CC   and is known as the common mediator. The N-terminus of Smad4 promotes the
CC   binding of the Smad complex to DNA, and the C-terminus provides an
CC   activation signal required for the complex to stimulate transcription.
CC   The antisense oligonucleotides of the invention are useful for diagnosis,
CC   prevention and treatment of conditions associated with Smad4 expression,
CC   such as tumour formation, inflammation and certain infections
XX
SQ   Sequence 18 BP; 11 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        580 ACTTTTGTTCTGTTTT 595
              |||||| ||||| |||
Db         16 ACTTTTCTTCTGCTTT 1


RESULT 266
AAZ55947
ID   AAZ55947 standard; cDNA; 18 BP.
XX
AC   AAZ55947;
XX
DT   10-APR-2000  (first entry)
XX
DE   Xenopus laevis keratin sense PCR primer, SEQ ID NO:25.
XX
KW   Keratin; Zic3; zinc finger; neuroregeneration; neurological disease;
KW   diagnosis; Alzheimer's disease; expression pattern; PCR primer; ss.
XX
OS   Xenopus laevis.
XX
PN   JP11341985-A.
XX
PD   14-DEC-1999.
XX
PF   30-APR-1998;   98JP-00121456.
XX
PR   31-MAR-1998;   98JP-00086979.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
XX
DR   WPI; 2000-101694/09.
XX
PT   A nerve formation-inducing gene - useful as a diagnostic agent for
PT   nervous diseases, and for treating Alzheimer disease.
XX
PS   Example 2; Page 11; 30pp; Japanese.
XX
CC   The invention relates to Xenopus laevis Zic3 protein (AAY69524). Zic3
CC   contains a zinc finger motif, and induces the formation of neurons. The
CC   cDNA was obtained from embryonic Xenopus nerve poly(A+) RNA. Zic3, and
CC   nucleotides encoding it, are useful as diagnostic tools for neurological
CC   diseases, and for the treatment of Alzheimer's disease. Sequences
CC   AAZ55931-Z55962 represent PCR primers used to determine which other genes
CC   are expressed with Zic3 in various Xenopus cell types in an
CC   exemplification of the present invention
XX
SQ   Sequence 18 BP; 8 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        597 CTACAACACAGAGTAC 612
              | | ||||||||||||
Db          3 CCAGAACACAGAGTAC 18


RESULT 267
AAA15529
ID   AAA15529 standard; DNA; 18 BP.
XX
AC   AAA15529;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Human G-alpha-i3 antisense oligonucleotide ISIS#25949.
XX
KW   Human; G-alpha-i3; G protein; Gi protein; adenylyl cyclase; dopamine;
KW   thyrotropin-releasing hormone; somatostatin; signal transduction pathway;
KW   antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .18
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Optionally phosphorothioate deoxynucleotides"
FT   modified_base   1. .4
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Optionally 2'-methoxyethyl nucleotides providing
FT                   bases 15. .18 are also 2'-methoxyethyl nucleotides. All
FT                   cytidine residues within this region are then 5-
FT                   methylcytidine"
FT   modified_base   15. .18
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "Optionally 2'-methoxyethyl nucleotides providing
FT                   bases 1. .4 are also 2'-methoxyethyl nucleotides. All
FT                   cytidine residues within this region are then 5-
FT                   methylcytidine"
XX
PN   US6063626-A.
XX
PD   16-MAY-2000.
XX
PF   24-JUN-1999;   99US-00339775.
XX
PR   24-JUN-1999;   99US-00339775.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM;
XX
DR   WPI; 2000-375497/32.
XX
PT   New antisense compounds targeting nucleic acids encoding human G-alpha-I3
PT   useful for treating diseases associated with G-alpha-I3 expression and as
PT   prophylaxis to prevent or delay infection, inflammation or tumor
PT   formation.
XX
PS   Claim 3; Col 39; 30pp; English.
XX
CC   The present sequence is an antisense oligonucleotide for the human G-
CC   alpha-i3 gene. The protein produced from this gene is a member of the G
CC   protein family, and more specifically of the Gi family. The Gi proteins
CC   are involved in hormonal inhibition of adenylyl cyclase and the
CC   regulation of plasma membrane enzymes. In addition, G-alpha-i3 has been
CC   shown to have a role in the dopamine, thyrotropin-releasing hormone and
CC   somatostatin signal transduction pathways. The oligonucleotide may be
CC   used to modulate expression of the G-alpha-i3 gene and can be used to
CC   prevent infection, inflammation and tumours
XX
SQ   Sequence 18 BP; 1 A; 3 C; 3 G; 11 T; 0 U; 0 Other;
```

```
  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        829 GTCTCTTTTCTTCTCT 844
              || |||||||||||  |
Db          2 GTATCTTTTCTTCTGT 17


RESULT 268
AAS95059/c
ID   AAS95059 standard; DNA; 18 BP.
XX
AC   AAS95059;
XX
DT   13-FEB-2002  (first entry)
XX
DE   Human otoferlin exon PCR primer #24.
XX
KW   Human; mouse; otoferlin; OTOF; brain; auditory function; PCR primer;
KW   autosomal nonsyndromic prelingual deafness; DFNB9; ss.
XX
OS   Homo sapiens.
XX
PN   WO200170972-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-IB000578.
XX
PR   24-MAR-2000; 2000US-0191738P.
XX
PA   (INSP ) INST PASTEUR.
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Yasunaga S,  Grati M,  Cohen-Salmon M,  El Amraoui A,  Petit C;
PI   Weil D;
XX
DR   WPI; 2001-611499/70.
XX
PT   Novel human gene Otoferlin, underlying an autosomal recessive
PT   nonsyndromic prelingual deafness, DFNB9, and proteins encoded by the
PT   gene, implicated in deafness.
XX
PS   Claim 25; Page 17; 99pp; English.
XX
CC   The invention relates to a purified polynucleotide (I) encoding a protein
CC   sequence (II) encoded by a novel human gene, otoferlin (OTOF) or the long
CC   human otoferlin isoform in brain. (I) was identified as underlying an
CC   autosomal nonsyndromic prelingual deafness DFNB9, and is thus useful for
CC   detecting deafness disease in humans and for characterising the functions
CC   of proteins and genes encoding them in auditory function. AAS95022-
CC   AAS95248 represent human and mouse otoferlin coding sequences, PCR
CC   primers and related sequences of the invention
XX
SQ   Sequence 18 BP; 3 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACCAAG 579
              |||| ||||| |||||
Db         16 CTCCGCCCAGTCCAAG 1


RESULT 269
ABS60851/c
ID   ABS60851 standard; DNA; 18 BP.
XX
AC   ABS60851;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Human genotyping PCR primer #4.
XX
KW   Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;
KW   BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
KW   kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
KW   angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
KW   polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
KW   cardiovascular disease; angina pectoris; hypertension; heart failure;
KW   myocardial infarction; ventricular hypertrophy; vascular disease;
KW   aneurysm; embolism; thrombosis; coronary artery disease; angioedaema;
KW   arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
KW   autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
KW   viral infection; bacterial infection; fungal infection; COPD;
KW   Chronic obstructive pulmonary disease; enterocolitis.
XX
OS   Homo sapiens.
XX
PN   WO200261131-A2.
XX
PD   08-AUG-2002.
XX
PF   03-DEC-2001; 2001WO-US047235.
XX
PR   04-DEC-2000; 2000US-0251015P.
PR   23-JAN-2001; 2001US-0263678P.
PR   02-MAR-2001; 2001US-0273037P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
PA   (TSUC/) TSUCHIHASHI Z.
PA   (HUIL/) HUI L.
XX
PI   Tsuchihashi Z,  Hui L,  Zerba KE,  Ma-Edmonds M,  Perrone MH;
PI   Swanson BN,  Powell JR;
XX
DR   WPI; 2002-619265/66.
XX
PT   New isolated nucleic acid with at least one polymorphic position, useful
PT   for detecting, diagnosing and treating disorders such as angioedema,
PT   cancer, viral, bacterial or fungal infection, cardiovascular and
PT   autoimmune diseases.
XX
PS   Example 3; Page 889; 977pp; English.
XX
CC   The invention relates to an isolated nucleic acid from a human gene
CC   encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC   tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC   1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC   2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
CC   polymorphic position. Also included are (1) a probe that hybridises to a
CC   polymorphic position as provided in the detailed summary of single
CC   nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC   sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC   obtaining the sample from one or more individuals and determining the
CC   nucleic acid sequence at one or more polymorphic positions in a gene
CC   encoding a protein selected from the group above; (3) constructing (M2)
CC   haplotypes using the genes comprising grouping at least two nucleic acids
CC   ; (4) identifying (M3) an individual at risk of developing a disorder
CC   upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
CC   using the polymorphic data; (5) a library of nucleic acids, each of which
CC   comprises one or more polymorphic positions within a gene encoding a
CC   human protein selected from the group above; and (6) genotyping (M4) an
CC   individual comprising obtaining a nucleic acid sample, determining the
CC   nucleotide present in at least one polymorphic position, and comparing at
CC   least one position with a known data set. The genes, (M1, M2, M3 and M4)
CC   and compositions are useful for detecting, diagnosing, treating,
CC   preventing various disorders such as angioedaema and diseases which
CC   involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC   disease, trachomas, and cardiovascular diseases like angina pectoris,
CC   hypertension, heart failure, myocardial infarction, ventricular
CC   hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
CC   artery disease, arteriosclerosis and/or atherosclerosis, and
```

CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC obstructive pulmonary disease (COPD) and enterocolitis (many other
CC diseases and disorders are listed in the specification). The
CC polynucleotides are also useful for chromosome identification. Antibodies
CC against the proteins may be utilised for immunophenotyping of cell lines
CC and biological samples. The present sequence is a genotyping PCR primer
CC for the gene encoding one of the proteins listed above
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 778 AGGGCAGCCCCTCTGG 793
||| ||| ||||||||
Db 17 AGGCCAGTCCCTCTGG 2

RESULT 270
ABK93994/c
ID ABK93994 standard; DNA; 18 BP.
XX
AC ABK93994;
XX
DT 27-AUG-2002 (first entry)
XX
DE Endothelin-2 (EDN-2) gene fragment PCR primer #2.
XX
KW Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor;
KW EDNR; signaling system; cardiovascular disease; coronary heart disease;
KW hypertension; atherosclerosis; angiogenesis; fatty acid metabolism;
KW diabetes; familial hypercholesterolaemia; forensic marker;
KW transgenic animal; solid support; cardiovascular regulator; PCR; primer;
KW ss.
XX
OS Synthetic.
XX
PN WO200224747-A2.
XX
PD 28-MAR-2002.
XX
PF 31-AUG-2001; 2001WO-EP010087.
XX
PR 19-SEP-2000; 2000EP-00120123.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S;
XX
DR WPI; 2002-435060/46.
XX
PT Novel polynucleotide of the endothelin/endothelin converting
PT enzyme/receptors of endothelin and endothelin converting enzyme signaling
PT system associated with cardiovascular disease, useful for treating the
PT disease.
XX
PS Example 6; Page 50; 190pp; English.
XX
CC The invention describes a polynucleotide (I) of the endothelin
CC (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR)
CC signaling system which is associated with a cardiovascular disease. (I),
CC the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I)
CC or (II) is useful for producing cells capable of expressing a molecular
CC variant polypeptide which is associated with a cardiovascular disease.
CC (II), (III), the EDN, ECE or EDNR polypeptide, or a cell expressing a
CC molecular variant gene comprising (I) is useful for identifying and
CC obtaining a pro-drug or drug capable of modulating the activity of a
CC molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system
CC or its gene product, or for identifying and obtaining an inhibitor of the
CC activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE
CC signaling system or its gene product. The isolated proteins and
CC polynucleotides encoding them are useful for preparation of a
CC pharmaceutical composition for treating a cardiovascular disease such as
CC coronary heart disease, hypertension, atherosclerosis, or related to
CC abnormal angiogenesis or fatty acid metabolism e.g. diabetes and familial
CC hypercholesterolaemia. The gene or a polynucleotide fragment of the
CC EDN/ECE/EDNR signaling system are useful as forensic markers, for
CC creating a transgenic animal and in creation of a solid support
CC comprising polynucleotides, genes, vectors, polypeptides, antibodies or
CC host cells of the invention. This sequence represents a PCR primer used
CC to isolate a cardiovascular regulator polynucleotide from DNA encoding
CC members of the EDN/ECE/EDNR signaling pathway
XX
SQ Sequence 18 BP; 2 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 3.2%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 550 GCCTCCCCAGCGAGCT 565
||||||| ||| ||||
Db 18 GCCTCCCAAGCCAGCT 3

RESULT 271
ABV99237/c
ID ABV99237 standard; DNA; 18 BP.
XX
AC ABV99237;
XX
DT 17-JAN-2003 (first entry)
XX
DE Human CYP7A1 fragment 1 forward PCR primer #2.
XX
KW Human; CYP7A1; hepatotropic; antilipaemic; cholesterol disorder;
KW cirrhosis; bile disorder; hypertriglyceridaemia; hypercholesterolaemia;
KW cytochrome P450, subfamily VIIA, polypeptide 1; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200260915-A1.
XX
PD 08-AUG-2002.
XX
PF 31-JAN-2001; 2001WO-US003164.
XX
PR 31-JAN-2001; 2001WO-US003164.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Chew A, Denton RR, Nandabalan K, Stephens JC;
XX
DR WPI; 2002-713314/77.
XX
PT New cytochrome P450 subfamily VIIA (cholesterol 7 alphamonooxygenase)
PT polypeptide 1 gene variants, useful for studying the expression and
PT activity of CYP7A1 and screening drugs for treating disorders of
PT cholesterol and bile metabolism.
XX
PS Example 1; Page 33; 84pp; English.
XX
CC The invention relates to a novel polymorphic variant of a sequence of
CC CYP7A1 protein or its fragment. The polypeptide has hepatotropic and
CC antilipaemic activity. The polymorphic variants are useful in studying
CC the expression and function of CYP7A1, in expressing CYP7A1 protein for
CC use in screening candidate drugs to treat diseases related to CYP7A1
CC activity, in studying the effect of the variation on the biological
CC activity of CYP7A1, and the binding affinity of candidate drugs targeting
CC CYP7A1 for the treatment of disorders such as cholesterol and bile
CC disorders. Haplotyping methods are useful in validating CYP7A1 as a
CC candidate target for treating a specific condition or disease predicted
CC to be associated with CYP7A1 activity, or in the design of clinical
CC trials of candidate drugs for treating a specific condition or disease
CC associated with CYP7A1 activity, such as cirrhosis, familial

```
CC   hypertriglyceridaemia and hypercholesterolaemia. Transgenic animals are
CC   also useful for studying expression of the CYP7A1 isogenes in vivo, for
CC   in vivo screening and testing of drugs targeted against CYP7A1 protein,
CC   and for testing the efficacy of therapeutic agents and compounds related
CC   to cholesterol and bile acid metabolism. The present sequence represents
CC   a PCR primer used in the invention to amplify target regions of the
CC   CYP7A1 gene
XX
SQ   Sequence 18 BP; 4 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        793 GTGCCAAGAGCTCTCC 808
              ||||||||| |||| |
Db         17 GTGCCAAGAACTCTTC 2


RESULT 272
AAS95586/c
ID   AAS95586 standard; DNA; 15 BP.
XX
AC   AAS95586;
XX
DT   14-FEB-2002  (first entry)
XX
DE   Apolipoprotein C-IV allele-specific oligonucleotide #7.
XX
KW   Apolipoprotein C-IV; APOC4; human; antilipaemic; haplotyping;
KW   hypertriglyceridaemia; allele-specific oligonucleotide; ASO; ss.
XX
OS   Homo sapiens.
XX
PN   WO200177127-A2.
XX
PD   18-OCT-2001.
XX
PF   10-APR-2001; 2001WO-US011715.
XX
PR   11-APR-2000; 2000US-0195825P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
PA   (LEEH/) LEE H H.
XX
PI   Choi JY,  Kliem SE,  Koshy B;
XX
DR   WPI; 2002-041284/05.
XX
PT   New haplotypes of human apolipoprotein C-IV gene, useful to diagnose and
PT   treat diseases associated with its activity such as hypertriglyceridemia.
XX
PS   Claim 16; Page 13; 64pp; English.
XX
CC   The invention relates to haplotyping the apolipoprotein C-IV (APOC4) gene
CC   of an individual, comprising determining if the individual has one of the
CC   APOC4 haplotypes or haplotype pairs fully defined in the specification.
CC   Haplotyping the APOC4 gene of an individual, comprises determining the
CC   identity of the nucleotide at two or more polymorphic sites in one copy
CC   of the gene. The method also comprises identifying an association between
CC   a trait and a haplotype or haplotype pair of the APOC4 gene, comprising
CC   comparing the frequency of the haplotype/pair in a population exhibiting
CC   the trait with that of a reference population. A higher frequency in the
CC   trait population indicates the trait is associated with the haplotype.
CC   The polynucleotides and screened compounds are useful for developing
CC   treatment for diseases associated with APOC4 activity such as
CC   hypertriglyceridaemia. AAS95580-AAS95634 represent human apolipoprotein C
CC   -IV allele-specific oligonucleotides of the invention
XX
SQ   Sequence 15 BP; 2 A; 1 C; 8 G; 3 T; 0 U; 1 Other;

  Query Match             3.2%;  Score 12.6;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACC 576
              |||||:|||||||
Db         13 CTCCTYCCAGACC 1


RESULT 273
ABQ72850
ID   ABQ72850 standard; DNA; 15 BP.
XX
AC   ABQ72850;
XX
DT   06-SEP-2002  (first entry)
XX
DE   Human GRM8 allele-specific oligonucleotide (ASO) primer, SEQ ID NO:54.
XX
KW   Human; glutamate receptor metabotropic 8; GRM8; receptor;
KW   chromosome 7q31.3-32.1; neurotransmission; glutamate-mediated;
KW   Smith-Lemli-Opitz syndrome; retinitis pigmentosa;
KW   neuropathological disorder; neuroprotective; ophthalmological;
KW   gene therapy; haplotyping; genotyping; haplotype; genetic variant;
KW   single nucleotide polymorphism; SNP; drug screening; drug discovery;
KW   allele-specific oligonucleotide; ASO; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200238587-A2.
XX
PD   16-MAY-2002.
XX
PF   09-NOV-2001; 2001WO-US047325.
XX
PR   09-NOV-2000; 2000US-0247576P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bieglecki KM,  Chew A,  Choi JY,  Koshy B,  Parks KE;
XX
DR   WPI; 2002-519291/55.
XX
PT   Genetic variants of Glutamate Receptor, Metabotropic 8 isogenes, useful
PT   for improving efficiency and reliability in drug development for treating
PT   neuropathological conditions and retinitis pigmentosa.
XX
PS   Claim 15; Page 14; 110pp; English.
XX
CC   The invention relates to a method for haplotyping the glutamate receptor,
CC   metabotropic 8 (GRM8) gene (ABQ72798, ABQ72905) of an individual, and
CC   also describes 21 novel polymorphic sites within the human GRM8 gene. The
CC   GRM8 gene is located on chromosome 7q31.3-32.1 and contains 10 exons
CC   which encode a 908 amino acid protein (ABB09564). GRM8 is involved in
CC   glutamate-mediated neurotransmission, being a member of a subfamily of
CC   metabotropic glutamate receptors that inhibit the activity of adenylate
CC   cyclase in response to glutamate stimulation. The chromosomal location of
CC   the GRM8 gene encompasses regions linked to Smith-Lemli-Opitz syndrome
CC   and a form of retinitis pigmentosa. GRM8 nucleic acid sequences are
CC   useful in studying the expression and function of GRM8, and in expressing
CC   GRM8 protein for use in screening drugs for the treatment of GRM8-
CC   associated diseases (e.g., neuropathological disorders, Smith-Lemli-Opitz
CC   syndrome and retinitis pigmentosa). GRM8 nucleic acids and proteins are
CC   also useful in studying the effect of polymorphisms on the biological
CC   activity of GRM8. Polymorphisms in the target region may be determined by
CC   the use of allele-specific oligonucleotides (ASOs; ABQ72800-ABQ72862) as
CC   probes and primers, and by primer extension using oligonucleotide primers
CC   comprising sequences ABQ72863-ABQ72904. The method of the invention is
CC   useful for haplotyping the GRM8 gene in populations and in individuals,
CC   enabling decisions to be made as to whether GRM8 is a likely therapeutic
CC   target for a disease of interest, and in the design of clinical trials of
CC   candidate drugs for treating GRM8-associated disorders. In addition,
CC   transgenic animals comprising a human GRM8 gene are useful for studying
CC   the expression of GRM8 isogenes in vivo, for in vivo screening and
CC   testing of drugs targeted to GRM8, and for testing the efficacy of
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CC   therapeutic agents and compounds for treating GRM8-associated conditions
CC   in a biological system. Sequences ABQ72821-ABQ72862 represent
CC   specifically claimed allele-specific oligonucleotide (ASO) primers used
CC   for detecting polymorphisms in the GRM8 gene
XX
SQ   Sequence 15 BP; 1 A; 6 C; 3 G; 4 T; 0 U; 1 Other;

  Query Match             3.2%;  Score 12.6;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        615 ACTCTGCCTGGTT 627
              |||||||||||:|
Db          3 ACTCTGCCTGGKT 15


RESULT 274
AAH37874
ID   AAH37874 standard; DNA; 18 BP.
XX
AC   AAH37874;
XX
DT   14-AUG-2001  (first entry)
XX
DE   SNP specific lower PCR primer SEQ ID 670.
XX
KW   Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW   SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW   Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW   polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW   acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW   inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200129262-A2.
XX
PD   26-APR-2001.
XX
PF   13-OCT-2000; 2000WO-US028436.
XX
PR   15-OCT-1999;   99US-0160096P.
XX
PA   (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI   Picoult-Newburg L,  Pohl M;
XX
DR   WPI; 2001-290930/30.
XX
PT   New genotyping oligonucleotide, useful for detecting the presence,
PT   absence or identity of single polynucleotide polymorphism in a nucleic
PT   acid sample.
XX
PS   Claim 1; Page 53; 83pp; English.
XX
CC   Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC   primer extension (SNPE) primers, and the sequences of regions flanking
CC   sites of single nucleotide polymorphisms SNPs. The present invention
CC   includes kits for determining the presence or absence of a SNP, using the
CC   oligonucleotides of the invention. The PCR primers are used to amplify a
CC   SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC   The oligonucleotides are useful for genotyping a nucleic acid sample by
CC   performing a single-nucleotide primer extension reaction. The
CC   oligonucleotides are useful for determining the presence, absence or
CC   identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC   assess by association analysis the genotype of an individual or group of
CC   individuals, having a pathological phenotypic trait suspected of being
CC   caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC   agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC   osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC   traits also include symptoms of or susceptibility to multifactorial
CC   disease of which a component is or may be genetic such as autoimmune
CC   diseases, including, rheumatoid arthritis, multiple sclerosis,
CC   inflammation, cancer, nervous system diseases and infection by pathogenic
CC   microorganism. The method is also useful in forensic investigations and
CC   paternity analysis. The present sequence represents a PCR primer specific
CC   for a human SNP containing DNA sequence
XX
SQ   Sequence 18 BP; 2 A; 9 C; 3 G; 3 T; 0 U; 1 Other;

  Query Match             3.2%;  Score 12.6;  DB 1;  Length 18;
  Best Local Similarity   92.3%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        548 AGGCCTCCCCAGC 560
              ||:|||||||||||
Db          6 AGRCCTCCCCAGC 18


RESULT 275
AAA23370
ID   AAA23370 standard; RNA; 14 BP.
XX
AC   AAA23370;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Integrin subunit beta 3 target site SEQ ID NO:6596.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US006507.
XX
PR   27-MAR-1998;   98US-0079678P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  Mcswiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or stability
PT   of an mRNA encoding an angiogenic factors.
XX
PS   Claim 54; Page 274; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with RNA
CC   cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
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CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ   Sequence 14 BP; 1 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 14;
  Best Local Similarity   71.4%;  Pred. No. 1.7e+02;
  Matches   10;  Conservative    3;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        537 CCTCTGCTCCTAGG 550
              ||:|:||:|| |||
Db          1 CCUCUGCUCCCAGG 14


RESULT 276
AAT56370/c
ID   AAT56370 standard; RNA; 15 BP.
XX
AC   AAT56370;
XX
DT   25-MAR-2003  (revised)
DT   14-MAY-1997  (first entry)
XX
DE   Mouse TNF-a hammerhead ribozyme target sequence (nt position 1398).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Mus musculus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 252; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC   the nucleotide base position indicated in the DE line. Regions of the
CC   mRNA that do not form secondary folding structures and that contain
CC   potential hammerhead and hairpin ribozyme cleavage sites were identified
CC   by computer analysis. Ribozymes directed against these mRNA sequences
CC   were designed and synthesised with modifications that improve their
CC   nuclease resistance. The ribozymes are designed to cleave the target
CC   sequences and thereby inhibit TNF-alpha expression, making them
CC   potentially useful for treating rheumatoid arthritis, septic shock and
CC   other inflammatory disorders including psoriasis, as well as for
CC   treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 15 BP; 3 A; 4 C; 4 G; 0 T; 4 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        840 TCTCTGAAGACAGC 853
              | ||||||||||||
Db         14 TGTCTGAAGACAGC 1


RESULT 277
AAV57031
ID   AAV57031 standard; DNA; 15 BP.
XX
AC   AAV57031;
XX
DT   25-MAR-2003  (revised)
DT   21-DEC-1998  (first entry)
XX
DE   Human Notch3 gene intron 15/exon 16 boundary sequence.
XX
KW   Human; Notch3; transmembrane receptor; lateral inhibition; regulation;
KW   developmental cascade; neurogenic gene; mutant; neurological disorder;
KW   cerebral autosomal dominant arteriopathy; subcortical infarct; CADASIL;
KW   leukoencephalopathy; therapy; intron; exon; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   intron          1. .9
FT                   /*tag=  a
FT                   /number= 15
FT   exon            10. .15
FT                   /*tag=  b
FT                   /number= 16
XX
PN   FR2751986-A1.
XX
```

```
PD   06-FEB-1998.
XX
PF   16-APR-1997;   97FR-00004680.
XX
PR   01-AUG-1996;   96FR-00009733.
XX
PA   (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX
PI   Tournier LE,  Joutel A,  Bousser MG,  Bach JF;
XX
DR   WPI; 1998-133138/13.
XX
PT   Human Notch3 nucleic acids - and methods for identifying pre-disposition
PT   to cerebral autosomal dominant arteriopathy with sub-cortical infarcts
PT   and leukoencephalopathy.
XX
PS   Example 3; Page 21; 45pp; French.
XX
CC   This sequence represents the boundary between intron 15 and exon 16 of
CC   the human Notch3 gene. Notch3 is a transmembrane receptor protein
CC   involved in lateral inhibition and regulating developmental cascades of
CC   neurogenic genes. Mutated Notch3 proteins are thought to be involved in
CC   neurological disorders, especially of the cerebral autosomal dominant
CC   arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL)
CC   type. Blocking expression of a mutated Notch3 gene or by substitution
CC   therapy with non-mutated Notch3 gene or protein can be used to treat
CC   CADASIL or related disorders. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 15 BP; 3 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        680 ACCCCCAGGGCCAC 693
              ||||||||| ||||
Db          2 ACCCCCAGGCCCAC 15


RESULT 278
AAX33145
ID   AAX33145 standard; DNA; 15 BP.
XX
AC   AAX33145;
XX
DT   24-JUN-1999  (first entry)
XX
DE   Peptide nucleic acid SEQ ID NO:19.
XX
KW   Beta-galactosidase; peptide nucleic acid; PNA; antibacterial;
KW   growth inhibition; antibiotic; bacteria; infection; disinfectant; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .15
FT                   /*tag=  a
FT                   /note= "N-acetyl (2-aminoethyl) glycine backbone"
FT   modified_base   8
FT                   /*tag=  b
FT                   /note= "n represents (egl)3 where egl = -NH-CH2-CH2-O-CH2
FT                   -CH2-O-CH2-C(=O)-"
FT   modified_base   15
FT                   /*tag=  c
FT                   /note= "t is attached to an amidated lysine residue e.g.
FT                   -t-Lys-NH2"
XX
PN   WO9913893-A1.
XX
PD   25-MAR-1999.
XX
PF   16-SEP-1998;   98WO-US019199.
XX
PR   16-SEP-1997;   97US-00932140.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (NIEL/) NIELSEN P E.
XX
PI   Nielsen PE,  Good L;
XX
DR   WPI; 1999-254325/21.
XX
PT   Killing or inhibiting bacterial growth by using a peptide nucleic acid.
XX
PS   Example 18; Page 31; 97pp; English.
XX
CC   A method has been developed for killing or inhibiting the growth of
CC   bacteria by contacting the bacteria with a peptide nucleic acid (PNA).
CC   The PNA is targeted to messenger or ribosomal RNA. The antibacterial
CC   composition has bacteriostatic and bactericidal properties. The PNA can
CC   be used to treat a mammal suffering from a bacterial infection where the
CC   PNA is complementary to a region of ribosomal RNA and of mRNA of the
CC   bacteria. Further treatment may include concurrent treatment with an
CC   antibiotic. The PNA can also be used as a method of disinfection by
CC   selecting an object to be disinfected, contacting the object with PNA (in
CC   solution) and rinsing the object with a sterile liquid to remove the PNA.
CC   The invention provides new ways of tackling bacterial infections which
CC   have become resistant to frequently used antibiotics. The present
CC   sequence represents a PNA from an example of the present invention
XX
SQ   Sequence 15 BP; 0 A; 4 C; 0 G; 10 T; 0 U; 1 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        830 TCTCTTTTCTTCTCT 844
              ||||||| ||||||
Db          1 TCTCTTTNTTTCTCT 15


RESULT 279
AAS02967
ID   AAS02967 standard; DNA; 15 BP.
XX
AC   AAS02967;
XX
DT   29-AUG-2001  (first entry)
XX
DE   Human CHMR1 allele specific oligonucleotide probe #27.
XX
KW   Human; m1 acetylcholine receptor; CHRM1; immunogen; antibody;
KW   Alzheimer's disease; dementia with Lewy bodies; DLB;
KW   allele specific oligonucleotide probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200127312-A2.
XX
PD   19-APR-2001.
XX
PF   12-OCT-2000; 2000WO-US028211.
XX
PR   13-OCT-1999;   99US-0159269P.
XX
PA   (GENA-) GENAISSANCE PHARM.INC.
XX
PI   Choi JY,  Denton RR,  Nandabalan K,  Stephens JC;
XX
DR   WPI; 2001-282046/29.
XX
PT   New variants of the m1 muscarinic acetylcholine receptor gene, useful to
PT   find treatment for Alzheimer's and dementia, have single nucleotide
PT   variations at one or more of five polymorphic sites.
XX
```

```
PS   Claim 15; Page 19; 52pp; English.
XX
CC   The sequence represents an allele specific oligonucleotide probe for
CC   genotyping individuals using the Human gene encoding the m1 muscarinic
CC   acetylcholine receptor, CHMR1. CHMR1 is one subtype of a family of 5
CC   genetically distinct muscarinic acetylcholine receptors, mAChR, that play
CC   important roles in higher brain function such as learning and memory. The
CC   protein is a possible drug target for treatments for Alzheimer's disease
CC   and dementia with Lewy bodies (DLB). The gene, polypeptide, haplotypes
CC   and antibodies raised against the protein are useful for diagnosing and
CC   developing treatments for diseases associated with the abnormal
CC   expression of the gene or activity of the protein, e.g. Alzheimer's
CC   disease and dementia with Lewy bodies
XX
SQ   Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        851 AGCGTCCTGGCTCC 864
              |||| |||||||||
Db          1 AGCGCCCTGGCTCC 14


RESULT 280
AAH42731/c
ID   AAH42731 standard; DNA; 15 BP.
XX
AC   AAH42731;
XX
DT   01-OCT-2001  (first entry)
XX
DE   A promoter element or transcription binding site.
XX
KW   Promoter element; transcription binding site; plant promoter; SMPER;
KW   synthetic multimeric promoter element region; gene expression;
KW   insect resistance; herbicide resistance; ss.
XX
OS   Rice tungro bacilliform virus.
XX
PN   WO200153476-A2.
XX
PD   26-JUL-2001.
XX
PF   19-JAN-2001; 2001WO-US002024.
XX
PR   21-JAN-2000; 2000US-0177437P.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Bruce WB,  Niu X;
XX
DR   WPI; 2001-476118/51.
XX
PT   New plant promoters with synthetic multimeric promoter element regions,
PT   useful in plant molecular biology, particularly in regulating gene
PT   expression in plants to increase resistance against insects or
PT   herbicides.
XX
PS   Example 1; Fig 1; 67pp; English.
XX
CC   AAH42709-72 represent promoter elements or transcription binding sites.
CC   They are used to to construct synthetic multimeric promoter element
CC   regions (SMPERs). The specification describes plant promoters which
CC   comprise SMPERs. The plant promoters are useful in plant molecular
CC   biology, particularly in regulating gene expression in plants. The
CC   promoters are especially useful for transforming plants or plant cells,
CC   e.g. to increase resistance against insects or herbicides
XX
SQ   Sequence 15 BP; 1 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        684 CCAGGGCCACACTG 697
              |||||| |||||||
Db         15 CCAGGGGCACACTG 2


RESULT 281
AAF49933
ID   AAF49933 standard; DNA; 15 BP.
XX
AC   AAF49933;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #893.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 66; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        530 CCAACATCCTCTGC 543
```

```
                  ||||||||||| ||
Db          1 CCAACATCCTCAGC 14


RESULT 282
AAF51146/c
ID   AAF51146 standard; DNA; 15 BP.
XX
AC   AAF51146;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2106.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 74; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        650 CAGACCTCAGTCTT 663
                || ||||||||||||
Db         15 CACACCTCAGTCTT 2


RESULT 283
AAF49932
ID   AAF49932 standard; DNA; 15 BP.
XX
AC   AAF49932;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #892.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV' (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 66; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        530 CCAACATCCTCTGC 543
                ||||||||||| ||
Db          2 CCAACATCCTCAGC 15


RESULT 284
AAF51149/c
ID   AAF51149 standard; DNA; 15 BP.
XX
```

```
AC   AAF51149;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2109.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 74; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        648 CACAGACCTCAGTC 661
              |||| |||||||||
Db         14 CACACACCTCAGTC 1


RESULT 285
AAF79917
ID   AAF79917 standard; DNA; 15 BP.
XX
AC   AAF79917;
XX
DT   11-JUN-2001  (first entry)
XX
DE   Nucleotide sequence of a an egl linked peptide nucleic acid (PNA).
XX
KW   Peptide nucleic acid; PNA; antibacterial; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .14
FT                   /*tag=  a
FT                   /note= "N-acetyl(2-aminoethyl)glycine backbone"
FT   modified_base   15
FT                   /*tag=  b
FT                   /note= "N-[acetyl(2-aminoethyl)]-C-lysine-glycine
FT                   backbone"
XX
PN   US6190866-B1.
XX
PD   20-FEB-2001.
XX
PF   27-MAR-1998;   98US-00049190.
XX
PR   16-SEP-1997;   97US-00932140.
XX
PA   (NIEL/) NIELSEN P E.
XX
PI   Nielsen PE,  Good L;
XX
DR   WPI; 2001-256212/26.
XX
PT   Determining bacterial target gene function, involves preparing peptide
PT   nucleic acid (PNA) compounds complementary to bacterial nucleotide
PT   sequence, determining activity of PNA, contacting active PNA compounds
PT   and determining the effect.
XX
PS   Example 5; Col 13; 34pp; English.
XX
CC   The present sequence represents an egl linked peptide nucleic acid (PNA),
CC   which is used in the method of the invention. The specification describes
CC   a method for determining target gene function in bacteria. The method
CC   comprises providing a nucleotide sequence of the target gene from the
CC   bacteria, selecting and preparing PNAs with regions complementary to a
CC   part of the nucleotide sequence, in anti-parallel orientation,
CC   determining activity of PNA by selected assay to identify active PNA
CC   compounds, contacting the bacteria with the active PNA compounds, and
CC   determining effect of these on the bacteria. The method is useful for
CC   determining the function of target gene in a bacteria. The method is also
CC   useful in the design of antisense antibacterial drugs and gene function
CC   analysis in bacteria. The method is used for killing or inhibiting of
CC   bacteria
XX
SQ   Sequence 15 BP; 0 A; 4 C; 0 G; 10 T; 0 U; 1 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        830 TCTCTTTTCTTCTCT 844
              ||||||| ||||||
Db          1 TCTCTTTNTTTCTCT 15


RESULT 286
AAD24265
ID   AAD24265 standard; DNA; 15 BP.
XX
AC   AAD24265;
XX
DT   07-MAR-2002  (first entry)
XX
DE   Egl linked triplex forming peptide nucleic acid.
XX
KW   Bacterial growth inhibitor; bacterial infection; disinfectant; PNA;
KW   antibacterial; peptide nucleic acid; ss.
```

```
XX
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .7
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "N-acetyl (2-aminoethyl) glycine backbone"
FT   modified_base   8
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "(O-2-aminoethyl-O'-acetyl-ethyleneglycol)3"
FT   modified_base   9. .15
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "N-acetyl (2-aminoethyl) glycine backbone"
FT   modified_base   15
FT                   /*tag= d
FT                   /mod_base= OTHER
FT                   /note= "N-[acetyl (2-aminoethyl)]-C-lysine- glycine
FT                   backbone"
XX
PN   US6300318-B1.
XX
PD   09-OCT-2001.
XX
PF   16-SEP-1997;   97US-00932140.
XX
PR   16-SEP-1997;   97US-00932140.
XX
PA   (NIEL/) NIELSEN P E.
XX
PI   Nielsen PE,  Good L;
XX
DR   WPI; 2002-033179/04.
XX
PT   Killing or inhibiting growth of bacteria using peptide nucleic acids
PT   complementary to a region of the bacterial ribosomal RNA is useful to
PT   treat a bacterial infection in a mammal and as a disinfectant.
XX
PS   Example 18; Col 18; 32pp; English.
XX
CC   The patent discloses methods and compositions for killing or inhibiting
CC   growth of bacteria comprising contacting the bacteria with a peptide
CC   nucleic acid (PNA) complementary to a region of the bacterial ribosomal
CC   RNA. The method is used to treat a bacterial infection in a mammal and as
CC   a disinfectant. The present sequence is an egl linked peptide nucleic
CC   acid (PNA) which is used in the exemplification of the invention
XX
SQ   Sequence 15 BP; 0 A; 4 C; 0 G; 10 T; 0 U; 1 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        830 TCTCTTTTCTTCTCT 844
              ||||||| ||||||
Db          1 TCTCTTTNTTTCTCT 15


RESULT 287
AAD24075/c
ID   AAD24075 standard; DNA; 15 BP.
XX
AC   AAD24075;
XX
DT   09-APR-2002  (first entry)
XX
DE   Rice tungro bacilliform virus RF2a transcription factor binding site.
XX
KW   Gene expression; maize; ubiquitin promoter; Ubi-1; HSE;
KW   heat shock element; agronomic gene; RF2a transcription factor; ds.
XX
OS   Rice tungro bacilliform virus.
XX
PN   WO200194394-A2.
XX
PD   13-DEC-2001.
XX
PF   08-JUN-2001; 2001WO-US018689.
XX
PR   09-JUN-2000; 2000US-00590558.
XX
PA   (PROD-) PRODIGENE INC.
XX
PI   Jilka JM,  Hood EE,  Howard JA;
XX
DR   WPI; 2002-122117/16.
XX
PT   New promoter sequences for causing expression of a structural gene
PT   especially agronomic gene or open reading frame in a plant cell,
PT   comprises engineered versions of the maize ubiquitin promoter.
XX
PS   Disclosure; Page 30; 68pp; English.
XX
CC   The invention relates to a promoter sequence capable of directing
CC   expression of a nucleotide sequence in a plant cell, comprising maize
CC   ubiquitin (Ubi-1) promoter sequence with a modification so that it does
CC   not include two overlapping heat shock elements (HSE) or it directs
CC   expression to increase the endosperm/embryo expression ratio of the
CC   protein when compared to the ratio from a wild-type ubiquitin promoter.
CC   The modified Ubi-1 promoter comprises a deletion of 3', 5' or both HSEs,
CC   two non-overlapping/adjacent HSEs, replacement of HSEs with a trimer of a
CC   seed specific element from the promoter of pea lectin gene Ps1 , or
CC   insertion of a transcription factor binding site in the HSE region. An
CC   expression construct comprising modified Ubi-1 promoter is useful for
CC   causing expression of a structural gene (agronomic genes) or open reading
CC   frame in a plant cell. The modified Ubi-1 promoter increases expression
CC   levels beyond those observed with native ubiquitin promoter. The present
CC   sequence is rice tungro bacilliform virus promoter RF2a transcription
CC   factor binding site used in the present invention
XX
SQ   Sequence 15 BP; 1 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        684 CCAGGGCCACACTG 697
              |||||| |||||||
Db         15 CCAGGGGCACACTG 2


RESULT 288
AAX10154
ID   AAX10154 standard; DNA; 16 BP.
XX
AC   AAX10154;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker downstream primer #460.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
```

XX
PR 06-NOV-1996; 96US-0030455P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX
PI Lander ES, Wang D, Hudson T;
XX
DR WPI; 1998-286974/25.
XX
PT New isolated nucleic acid segments from the human genome - used for
PT determining polymorphic forms for use in e.g. forensics, paternity
PT testing or phenotypic typing for disease.
XX
PS Claim 16; Page 207; 310pp; English.
XX
CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC hypercholesterolemia, polycystic kidney disease, hereditary
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC autoimmune diseases, inflammation, cancer, diseases of the nervous
CC system, infection by pathogenic microorganisms, and characteristics such
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC endurance, fertility, and susceptibility or receptivity to particular
CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC segments can also be used to produce medicaments for the treatment or
CC prophylaxis of such diseases
XX
SQ Sequence 16 BP; 1 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. No. 2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 818 GGGTTGGCTGTGTC 831
||||||||.|||||
Db 2 GGGTTGGCAGTGTC 15

RESULT 289
AAA18464/c
ID AAA18464 standard; RNA; 17 BP.
XX
AC AAA18464;
XX
DT 19-JUN-2000 (first entry)
XX
DE Human TIE-2 substrate sequence SEQ ID NO:1690.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 56; Page 96; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 4 A; 2 C; 9 G; 0 T; 2 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 803 CTCTCCTCCAACTC 816
||||||||.|||||
Db 17 CTCTCCTCGAACTC 4

RESULT 290
AAQ32223/c
ID AAQ32223 standard; DNA; 17 BP.
XX
AC AAQ32223;
XX
DT 25-MAR-2003 (revised)
DT 22-APR-1993 (first entry)
XX
DE Cloning tail 3'(3Y, 3Z, 3Z', 4Z).
XX
KW Neurotrophin; NT; nerve growth factor; NGF;
KW brain-derived neurotrophic factor; BDNF; probe; primer; ss.
XX
OS Synthetic.
XX
PN WO9220365-A1.
XX
PD 26-NOV-1992.
XX
PF 20-MAY-1992; 92WO-US004266.
XX
PR 21-MAY-1991; 91US-00703450.

PR 12-JUL-1991; 91US-00729253.
PR 23-JUL-1991; 91US-00734422.
PR 28-AUG-1991; 91US-00751356.
PR 20-SEP-1991; 91US-00762674.
PR 14-NOV-1991; 91US-00791924.
XX
PA (REGE-) REGENERON PHARM INC.
XX
PI Hallbook F, Ibanez Moliner CF, Persson HB, Yancopoulos GD;
XX
DR WPI; 1992-415468/50.
XX
PT Use of newo-trophin-4 for promoting growth and survival of nerve cells -
PT useful in treating neurological, fertility and immunological disorders
PT and in diagnosis.
XX
PS Disclosure; Page 112 + Fig 13C; 180pp; English.
XX
CC Degenerate oligonucleotides for cloning of human and rat NT-4 are given
CC in AAQ27957-58 and AAQ32219-24 (including tails). The primers are based
CC on sequences of amino acids 167-223 of NT-4 from Xenopus (see AAR29497)
CC and amino acids 184-189 from rat BDNF (see AAR29498). Together 2Y
CC (AAQ37957) and 2Z (AAQ37958) represent all known sequences for
CC neurotrophins from all species in this region. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
SQ Sequence 17 BP; 5 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 663 TTCTCGAAGCTTGG 676
|||| |||||||||
Db 14 TTCTAGAAGCTTGG 1

RESULT 291
AAQ54724/c
ID AAQ54724 standard; DNA; 17 BP.
XX
AC AAQ54724;
XX
DT 25-MAR-2003 (revised)
DT 21-JUN-1994 (first entry)
XX
DE Human and rat NT-4 DNA tail cloning oligomer 3'.
XX
KW Neurotrophin-4; NT-4; viper; Xenopus; rat; human; nerve growth factor;
KW brain-derived neurotrophin factor; BDNF; NGF; acute neuropraxia; NT-3;
KW gene family; survival; growth; differentiation; neuron; cholinergic;
KW basal forebrain; cholinergic neuron; dopaminergic; neuron disease;
KW peripheral neuropathy; hippocampus; striatum; neurotmesis; atoxmesis;
KW diabetic neuropathy; amyotrophic lateral sclerosis; compression; tumour;
KW abscess; trauma; Alzheimer's disease; Parkinson's disease; retina;
KW retinal ganglion cell degeneration; antibody; diagnosis; ss.
XX
OS Synthetic.
XX
PN WO9325684-A1.
XX
PD 23-DEC-1993.
XX
PF 11-JUN-1993; 93WO-US005672.
XX
PR 12-JUN-1992; 92US-00898194.
XX
PA (REGE-) REGENERON PHARM INC.
XX
PI Ip N, Altar CA, Distefano P, Ventimiglia R, Wiegand S, Wong V;
PI Yancopoulos GD;
XX
DR WPI; 1994-007541/01.
XX
PT Neuro:trophin-4-proteins which support survival, growth and
PT differentiation of motor neurons - used to treat motor neuron disorders
PT e.g. dopaminergic and cholinergic neuron diseases.
XX
PS Disclosure; Page 138; 181pp; English.
XX
CC The sequences given in AAQ54718-25 are degenerate oligomers which were
CC used in the isolation of the rat and human neurotrophin-4 (NT-4) genes.
CC NT-4 is a member of the brain-derived neurotrophin factor (BDNF)/nerve
CC growth factor (NGF)/NT-3 gene family. NT-4 proteins can promote the
CC survival, growth and differentiation of neurons, such as basal forebrain
CC cholinergic neurons. NT-4 proteins can be used to treat dopaminergic or
CC cholinergic neuron diseases and disorders. NT-4 related proteins may be
CC used to treat peripheral neuropathy and diseases of the hippocampus and
CC striatum. Disorders which may be treated in this way, include acute
CC neuropraxia, neurotmesis, atoxmesis, diabetic neuropathy, amyotrophic
CC lateral sclerosis or compression, a tumour, abscess, trauma, Alzheimer's
CC disease, Parkinson's disease or a disorder of the retina, especially
CC involving retinal ganglion cell degeneration. Anti-NT-4 antibodies may be
CC used for diagnostic or therapeutic purposes, eg. to monitor the
CC progression of diseases associated with alterations in the pattern of NT-
CC 4 expression. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 17 BP; 5 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 663 TTCTCGAAGCTTGG 676
|||| |||||||||
Db 14 TTCTAGAAGCTTGG 1

RESULT 292
AAT53528/c
ID AAT53528 standard; RNA; 17 BP.
XX
AC AAT53528;
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 1503).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.

PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 202; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 866 GTTGGAACACTTTC 879
||||||||| ||||
Db 14 GTTGGAACATTTTC 1

RESULT 293
AAT53691/c
ID AAT53691 standard; RNA; 17 BP.
XX
AC AAT53691;
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 2176).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 203; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy        866 GTTGGAACACTTTC 879
              ||||||||| ||||
Db         14 GTTGGAACATTTTC 1
```

RESULT 294
AAT53446/c
ID AAT53446 standard; RNA; 17 BP.
XX
AC AAT53446;
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 564).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 201; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy        866 GTTGGAACACTTTC 879
              ||||||||| ||||
Db         14 GTTGGAACATTTTC 1
```

RESULT 295
AAV37795/c
ID AAV37795 standard; DNA; 17 BP.
XX
AC AAV37795;
XX
DT 09-SEP-1998 (first entry)
XX
DE Interleukin-15 gene inhibitor oligonucleotide 6.
XX
KW Interleukin gene; IL-15; inhibitor; oligomer; expression;
KW transcription-inhibiting complex; polypurine-polypyrimidine region;
KW inflammatory poly-arthopathy; rheumatoid arthritis; asthma; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9818812-A1.
XX
PD 07-MAY-1998.
XX
PF 29-AUG-1997; 97WO-US015397.
XX
PR 25-OCT-1996; 96US-00740215.
XX
PA (HISM) HISAMITSU PHARM CO LTD.
XX
PI Veerapanane D, Hamanaka S, Nozawa I;
XX
DR WPI; 1998-272129/24.
XX
PT Oligomer capable of inhibiting expression of an interleukin gene - is
PT used to alleviate inflammatory poly-arthopathy, especially rheumatoid
PT arthritis.
XX
PS Claim 20; Page 8; 19pp; English.
XX
CC An oligomer has been developed which is capable of inhibiting expression
CC of an interleukin gene. The interleukin gene is preferably an interleukin
CC -15 (IL-15) gene. The oligomer can be an oligonucleotide or an
CC oligonucleotide analogue. When it is an oligonucleotide analogue it is
CC selected from protein nucleic acid, morpholino, methylene linkage,

```
CC   boronated, and pteridine oligonucleotide analogues. The analogue is
CC   linked at its 5' end or 3' end to an intercalator. The intercalator is a
CC   psoralen or acridine derivative.The oligomer is preferably an
CC   oligonucleotide made of DNA. The oligonucleotide is a phosphodiester,
CC   phosphorothioate, methylphosphonate, or methylphosphonothioate
CC   oligonucleotide derivative, especially a phosphodiester oligonucleotide.
CC   The oligonucleotide is at least 5 (preferably 5-50) nucleotides, in
CC   length. The present sequence represents a specifically claimed
CC   oligonucleotide of the present invention. The oligomer can be used to
CC   alleviate inflammatory polyarthopathy, especially that associated with
CC   rheumatoid arthritis. The oligomer can also be used to alleviate
CC   eosinophilic inflammation, especially that associated with chronic asthma
XX
SQ   Sequence 17 BP; 12 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCTCT 844
              || ||||||||||
Db         17 CTTTTTTCTTCTCT 4


RESULT 296
AAV37791
ID   AAV37791 standard; DNA; 17 BP.
XX
AC   AAV37791;
XX
DT   09-SEP-1998  (first entry)
XX
DE   Interleukin-15 gene inhibitor oligonucleotide 2.
XX
KW   Interleukin gene; IL-15; inhibitor; oligomer; expression;
KW   transcription-inhibiting complex; polypurine-polypyrimidine region;
KW   inflammatory poly-arthopathy; rheumatoid arthritis; asthma; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9818812-A1.
XX
PD   07-MAY-1998.
XX
PF   29-AUG-1997;   97WO-US015397.
XX
PR   25-OCT-1996;   96US-00740215.
XX
PA   (HISM ) HISAMITSU PHARM CO LTD.
XX
PI   Veerapanane D,  Hamanaka S,  Nozawa I;
XX
DR   WPI; 1998-272129/24.
XX
PT   Oligomer capable of inhibiting expression of an interleukin gene - is
PT   used to alleviate inflammatory poly-arthopathy, especially rheumatoid
PT   arthritis.
XX
PS   Claim 19; Page 8; 19pp; English.
XX
CC   An oligomer has been developed which is capable of inhibiting expression
CC   of an interleukin gene. The interleukin gene is preferably an interleukin
CC   -15 (IL-15) gene. The oligomer can be an oligonucleotide or an
CC   oligonucleotide analogue. When it is an oligonucleotide analogue it is
CC   selected from protein nucleic acid, morpholino, methylene linkage,
CC   boronated, and pteridine oligonucleotide analogues. The analogue is
CC   linked at its 5' end or 3' end to an intercalator. The intercalator is a
CC   psoralen or acridine derivative.The oligomer is preferably an
CC   oligonucleotide made of DNA. The oligonucleotide is a phosphodiester,
CC   phosphorothioate, methylphosphonate, or methylphosphonothioate
CC   oligonucleotide derivative, especially a phosphodiester oligonucleotide.
CC   The oligonucleotide is at least 5 (preferably 5-50) nucleotides, in
CC   length. The present sequence represents a specifically claimed
CC   oligonucleotide of the present invention. The oligomer can be used to
CC   alleviate inflammatory polyarthopathy, especially that associated with
CC   rheumatoid arthritis. The oligomer can also be used to alleviate
CC   eosinophilic inflammation, especially that associated with chronic asthma
XX
SQ   Sequence 17 BP; 0 A; 5 C; 0 G; 12 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCTCT 844
              || ||||||||||
Db          1 CTTTTTTCTTCTCT 14


RESULT 297
AAV60475/c
ID   AAV60475 standard; DNA; 17 BP.
XX
AC   AAV60475;
XX
DT   08-DEC-1998  (first entry)
XX
DE   Thrombin-binding aptamer consensus related sequence.
XX
KW   Thrombin; aptamer; therapeutic; diagnosis; secondary; ss.
XX
OS   Synthetic.
XX
PN   US5756291-A.
XX
PD   26-MAY-1998.
XX
PF   07-JUN-1995;   95US-00484192.
XX
PR   21-FEB-1992;   92WO-US001383.
PR   21-AUG-1992;   92US-00934387.
XX
PA   (GILE-) GILEAD SCI INC.
XX
PI   Vermaas E,  Leung L,  Albrecht G,  Toole JJ,  Griffin L,  Latham J;
XX
DR   WPI; 1998-321524/28.
XX
PT   Assay for thrombin and purification of thrombin - using DNA aptamer.
XX
PS   Example 6; Fig 1; 115pp; English.
XX
CC   AAV60456-87 represent thrombin-binding aptamer consensus related
CC   sequences. The thrombin-binding aptamers are identified using the method
CC   of the invention. The specification describes a method for identifying
CC   oligomer sequences which specifically bind target molecules such as serum
CC   proteins, kinins, eicosanoids and extracellular proteins. The method
CC   involves complexation of the target molecule with a mixture of
CC   oligonucleotides containing random sequences and sequences which serve as
CC   primer for PCR amplification. A complex is only formed with specifically
CC   binding oligonucleotide sequences. The complex is isolated, and complexed
CC   members of the oligonucleotide mixture are recovered by PCR. The method
CC   can be used to generate aptamers that can be used for therapeutic and
CC   diagnostic purposes, and for generating secondary aptamers
XX
SQ   Sequence 17 BP; 1 A; 1 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        565 TCCTCCCAGACCAA 578
              ||| ||||||||||
Db         17 TCCACCCAGACCAA 4
```

```
RESULT 298
AAA22642
ID   AAA22642 standard; RNA; 17 BP.
XX
AC   AAA22642;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Integrin subunit beta 3 substrate sequence SEQ ID NO:5868.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US006507.
XX
PR   27-MAR-1998;   98US-0079678P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  Mcswiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or stability
PT   of an mRNA encoding an angiogenic factors.
XX
PS   Claim 54; Page 233; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with RNA
CC   cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ   Sequence 17 BP; 0 A; 5 C; 4 G; 0 T; 8 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   42.9%;  Pred. No. 2.2e+02;
  Matches    6;  Conservative    7;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        821 TTGGCTGTGTCTCT 834
              ::|||: :|:|:|:
Db          3 UUGGCUUUGUCUCU 16


RESULT 299
AAA22643
ID   AAA22643 standard; RNA; 17 BP.
XX
AC   AAA22643;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Integrin subunit beta 3 substrate sequence SEQ ID NO:5869.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US006507.
XX
PR   27-MAR-1998;   98US-0079678P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  Mcswiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or stability
PT   of an mRNA encoding an angiogenic factors.
XX
PS   Claim 54; Page 233; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with RNA
CC   cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3
XX
```

```
SQ   Sequence 17 BP; 0 A; 4 C; 5 G; 0 T; 8 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   42.9%;  Pred. No. 2.2e+02;
  Matches    6;  Conservative    7;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        821 TTGGCTGTGTCTCT 834
              ::|||: :|:|:|:
Db          2 UUGGCUUUGUCUCU 15


RESULT 300
AAA17534/c
ID   AAA17534 standard; RNA; 17 BP.
XX
AC   AAA17534;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:760.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US006507.
XX
PR   27-MAR-1998;   98US-0079678P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  Mcswiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or stability
PT   of an mRNA encoding an angiogenic factors.
XX
PS   Claim 53; Page 85; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with RNA
CC   cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ   Sequence 17 BP; 9 A; 3 C; 2 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        580 ACTTTTGTTCTGTT 593
              |||||| |||||||
Db         14 ACTTTTATTCTGTT 1


RESULT 301
AAV91267/c
ID   AAV91267 standard; RNA; 17 BP.
XX
AC   AAV91267;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human C-raf target site nucleotide position 2173.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW   screening; identification; synthesis; deprotection; purification; cancer;
KW   inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW   restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US009249.
XX
PR   09-MAY-1997;   97US-0046059P.
PR   09-JUN-1997;   97US-0049002P.
PR   03-JUL-1997;   97US-0051718P.
PR   22-AUG-1997;   97US-0056808P.
PR   02-OCT-1997;   97US-0061321P.
PR   02-OCT-1997;   97US-0061324P.
PR   05-NOV-1997;   97US-0064866P.
PR   19-DEC-1997;   97US-0068212P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Jarvis T,  Matulic-Adamic J,  Reynolds M,  Kisich K,  Bellon L;
PI   Parry T,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Burgin A;
PI   Thompson J,  Workman CT,  Beaudry A,  Sweedler D;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected processes
PT   - especially ribozymes that cleave Raf RNA for treating cancer,
PT   restenosis, and also new ribozymes and modified nucleoside triphosphates
PT   used as antiviral agents and synthons.
XX
PS   Claim 177; Page 151; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
CC   acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC   a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC   in systems where modulation has occurred and/or determining the sequence
CC   of at least part of the SBDs in such systems. Nucleic acid molecules with
CC   endonuclease activity and catalytic activity, from the present invention,
CC   are used to modulate gene expression in plant and mammalian cells and to
```

CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 838 CTTCTCTGAAGACA 851
||||||||||| |||
Db 17 CTTCTCTGAAAACA 4

RESULT 302
AAV91268/c
ID AAV91268 standard; RNA; 17 BP.
XX
AC AAV91268;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human C-raf target site nucleotide position 2174.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW screening; identification; synthesis; deprotection; purification; cancer;
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US009249.
XX
PR 09-MAY-1997; 97US-0046059P.
PR 09-JUN-1997; 97US-0049002P.
PR 03-JUL-1997; 97US-0051718P.
PR 22-AUG-1997; 97US-0056808P.
PR 02-OCT-1997; 97US-0061321P.
PR 02-OCT-1997; 97US-0061324P.
PR 05-NOV-1997; 97US-0064866P.
PR 19-DEC-1997; 97US-0068212P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
PS Claim 177; Page 151; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 17 BP; 5 A; 3 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 838 CTTCTCTGAAGACA 851
||||||||||| |||
Db 16 CTTCTCTGAAAACA 3

RESULT 303
AAA35998/c
ID AAA35998 standard; DNA; 17 BP.
XX
AC AAA35998;
XX
DT 26-JUL-2000 (first entry)
XX
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:55.
XX
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;
KW tumour characterisation; hybridisation; ss.
XX
OS Homo sapiens.
XX
PN WO200018960-A2.
XX
PD 06-APR-2000.
XX
PF 24-SEP-1999; 99WO-US022283.
XX
PR 25-SEP-1998; 98US-0101757P.
XX
PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
XX
PI Landers JE, Jordan B, Housman DE, Charest A;
XX
DR WPI; 2000-293181/25.
XX
PT Detection of single nucleotide polymorphisms in genomes by preparation
PT and analysis of reduced complexity genomes, useful for genotyping,
PT fingerprinting and determining allele frequency of SNPs.
XX
PS Disclosure; Page 55; 111pp; English.
XX
CC A method has been developed for detecting the presence or absence of a
CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
CC method comprises preparing a reduced complexity genome (RCG) from the
CC genomic sample and analysing the RCG for the presence or absence of a SNP
CC allele. The method can be used to characterise a tumour, to generate a
CC genomic pattern for an individual genome or to generate a genomic
CC classification code for a genome. The method can be used to assess
CC whether a subject is at risk for developing a disease or to identify a

```
CC   set of SNP alleles associated with a disease. The method can also be used
CC   to perform linkage analysis. AAA35944 to AAA35947 represent sequences
CC   used in the exemplification of the present invention. AAA35948 to
CC   AAA36632 represent nucleotide sequences containing SNPs
XX
SQ   Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        819 GGTTGGCTGTGTCT 832
              || ||||||||||||
Db         17 GGCTGGCTGTGTCT 4


RESULT 304
AAA25681
ID   AAA25681 standard; DNA; 17 BP.
XX
AC   AAA25681;
XX
DT   19-JUL-2000  (first entry)
XX
DE   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2179.
XX
KW   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954459-A2.
XX
PD   28-OCT-1999.
XX
PF   19-APR-1999;   99WO-US008547.
XX
PR   20-APR-1998;   98US-0082404P.
PR   23-JUN-1998;   98US-00103636.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Thompson JD,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Bellon L;
PI   Reynolds M,  Zwick M,  Jarvis T,  Woolf T,  Haeberli P;
PI   Matulic-Adamic J;
XX
DR   WPI; 2000-013248/01.
XX
PT   New nucleic acids that interact, and optionally cleave, target sequences,
PT   used to treat cancer.
XX
PS   Claim 77; Page 87; 148pp; English.
XX
CC   The present invention describes nucleic acids (A) that interact stably
CC   with a target sequence and contain at least one phosphoro(di)thioate
CC   link, having endonuclease activity. (A), and more generally any catalytic
CC   nucleic acid (A') that modulates expression of the oestrogen receptor
CC   gene, are used to treat cancer (particularly of breast or endometrium),
CC   in vivo or by transforming cells ex vivo and implanting treated cells, or
CC   for other conditions associated with levels of oestrogen receptor.
CC   Because of the high selectivity for targeted RNA, (A) can also be used to
CC   correlate inhibition of gene expression with alterations in phenotype,
CC   particularly for identification of therapeutic targets, and as research
CC   reagents (for RNA, in the same way that restriction endonucleases are
CC   used with DNA). The combination of modifications in (A) improves
CC   resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC   AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC   AAA24748 to AAA25992 represent their corresponding target sequences.
CC   AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC   sequences, and AAA26107 to AAA26218 represent their corresponding target
CC   sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC   antisense oligonucleotides used in the exemplification of the present
CC   invention
XX
SQ   Sequence 17 BP; 0 A; 4 C; 3 G; 10 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTC 838
              |||||| |||||||
Db          2 CTGTGTTTCTTTTC 15


RESULT 305
AAA25682
ID   AAA25682 standard; DNA; 17 BP.
XX
AC   AAA25682;
XX
DT   19-JUL-2000  (first entry)
XX
DE   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2180.
XX
KW   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954459-A2.
XX
PD   28-OCT-1999.
XX
PF   19-APR-1999;   99WO-US008547.
XX
PR   20-APR-1998;   98US-0082404P.
PR   23-JUN-1998;   98US-00103636.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Thompson JD,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Bellon L;
PI   Reynolds M,  Zwick M,  Jarvis T,  Woolf T,  Haeberli P;
PI   Matulic-Adamic J;
XX
DR   WPI; 2000-013248/01.
XX
PT   New nucleic acids that interact, and optionally cleave, target sequences,
PT   used to treat cancer.
XX
PS   Claim 77; Page 87; 148pp; English.
XX
CC   The present invention describes nucleic acids (A) that interact stably
CC   with a target sequence and contain at least one phosphoro(di)thioate
CC   link, having endonuclease activity. (A), and more generally any catalytic
CC   nucleic acid (A') that modulates expression of the oestrogen receptor
CC   gene, are used to treat cancer (particularly of breast or endometrium),
CC   in vivo or by transforming cells ex vivo and implanting treated cells, or
CC   for other conditions associated with levels of oestrogen receptor.
CC   Because of the high selectivity for targeted RNA, (A) can also be used to
CC   correlate inhibition of gene expression with alterations in phenotype,
CC   particularly for identification of therapeutic targets, and as research
CC   reagents (for RNA, in the same way that restriction endonucleases are
CC   used with DNA). The combination of modifications in (A) improves
CC   resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC   AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC   AAA24748 to AAA25992 represent their corresponding target sequences.
CC   AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC   sequences, and AAA26107 to AAA26218 represent their corresponding target
CC   sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC   antisense oligonucleotides used in the exemplification of the present
CC   invention
```

```
XX
SQ   Sequence 17 BP; 0 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTC 838
              |||||| |||||||
Db          1 CTGTGTTTCTTTTC 14


RESULT 306
AAA89019/c
ID   AAA89019 standard; DNA; 17 BP.
XX
AC   AAA89019;
XX
DT   05-MAR-2001  (first entry)
XX
DE   Plasmodium falciparum chorismate synthase sequencing primer PFCS13.
XX
KW   Chorismate synthase; shikimate pathway; plant-like enzyme; malaria;
KW   antimalarial; antiparasitic; vaccine; primer; sequencing; ss.
XX
OS   Plasmodium falciparum.
XX
PN   WO200066154-A2.
XX
PD   09-NOV-2000.
XX
PF   27-APR-2000; 2000WO-US011478.
XX
PR   04-MAY-1999;   99US-0132506P.
XX
PA   (ARCH-) ARCH DEV CORP.
PA   (MRJM-) MRJ TRUST.
PA   (MCLE/) MCLEOD R W.
PA   (ROBE/) ROBERTS C.
PA   (ROBE/) ROBERTS F.
PA   (JOHN/) JOHNSON J.
PA   (KIRI/) KIRISITS M.
PA   (FERG/) FERGUSON D.
PA   (LYON/) LYONS R.
PA   (MUIE/) MUI E.
PA   (HASE/) HASELKORN R.
PA   (MACK/) MACK D.
PA   (SAMU/) SAMUEL B.
PA   (GORN/) GORNICKI P.
PA   (ZUTH/) ZUTHER E.
XX
PI   Mcleod RW,  Roberts C,  Roberts F,  Johnson J,  Kirisits M;
PI   Ferguson D,  Lyons R,  Mui E,  Haselkorn R,  Mack D,  Samuel B;
PI   Gornicki P,  Zuther E;
XX
DR   WPI; 2000-687446/67.
XX
PT   Vaccinating against Toxoplasma gondii using nucleic acids encoding
PT   chorismate synthase (CS) or attenuated parasites lacking the CS gene.
XX
PS   Example 14; Page 98; 250pp; English.
XX
CC   Sequencing primer PFCS13 is 1 of 14 primers (see AAA89007-A89020)
CC   customised for the sequencing of chorismate synthase (CS) cDNA (see
CC   AAA88980) of Plasmodium falciparum. Components of plant-like metabolic
CC   pathways in P. falciparum, such as shikimate pathway CS, can be used to
CC   develop compositions that interfere with its growth and survival.
CC   Components include enzymes, transit peptides, and nucleotide sequences
CC   encoding the enzymes and peptides, or promoters of these sequences, to
CC   which antibodies, antisense molecules and other inhibitors are directed.
CC   Diagnostic and therapeutic reagents and vaccines are developed based on
CC   the components and their inhibitors. CS nucleic acids may be altered to
CC   produce a knockout organism useful in vaccine production
XX
SQ   Sequence 17 BP; 8 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        822 TGGCTGTGTCTCTT 835
              ||||||| ||||||
Db         16 TGGCTGTTTCTCTT 3


RESULT 307
AAH95807/c
ID   AAH95807 standard; RNA; 17 BP.
XX
AC   AAH95807;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human Chk1 ribozyme substrate SEQ ID NO: 1232.
XX
KW   Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
KW   RNA cleavage; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157206-A2.
XX
PD   09-AUG-2001.
XX
PF   02-FEB-2001; 2001WO-US003504.
XX
PR   03-FEB-2000; 2000US-0179983P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (FATT/) FATTAEY A R.
XX
PI   Fattaey AR,  Jarvis T,  Mcswiggen J,  Booher RN,  Holman PS;
XX
DR   WPI; 2001-496922/54.
XX
PT   Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
PT   molecules, which downregulates expression of a checkpoint kinase-1 gene,
PT   useful for treating colorectal, lung, breast or prostate cancers.
XX
PS   Claim 4; Page 89; 115pp; English.
XX
CC   The present invention provides nucleic acid molecules capable of
CC   downregulating the expression of the human checkpoint kinase-1 (Chk1)
CC   gene. These may be antisense or ribozyme sequences, and are useful in the
CC   treatment of diseases associated with conditions affected by Chk1 levels,
CC   including cancer. The present sequence is an oligonucleotide described in
CC   the exemplification of the invention
XX
SQ   Sequence 17 BP; 4 A; 1 C; 7 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        799 AGAGCTCTCCTCCA 812
              | ||||||||||||
Db         17 AAAGCTCTCCTCCA 4


RESULT 308
ABK03137/c
ID   ABK03137 standard; RNA; 17 BP.
XX
AC   ABK03137;
XX
DT   12-MAR-2002  (first entry)
```

XX
DE Human CD20 Inozyme #88.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 147; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 550 GCCTCCCCAGCGAG 563
||||||||||| |||
Db 17 GCCTCCCCAGAGAG 4

RESULT 309
ABK03695/c
ID ABK03695 standard; RNA; 17 BP.
XX
AC ABK03695;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Amberzyme #44.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 167; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr

```
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is an amberzyme molecule of the invention
XX
SQ   Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        550 GCCTCCCCAGCGAG 563
              ||||||||||  |||
Db         16 GCCTCCCCAGAGAG 3


RESULT 310
ABN02144/c
ID   ABN02144 standard; DNA; 17 BP.
XX
AC   ABN02144;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2136.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 2136; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        684 CCAGGGCCACACTG 697
              ||||||||||| ||
Db         17 CCAGGGCCACAATG 4


RESULT 311
ABN02148/c
ID   ABN02148 standard; DNA; 17 BP.
XX
AC   ABN02148;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2140.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
```

PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 2140; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 1 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 683 CCCAGGGCCACACT 696
||||||||||||
Db 14 CCCAGGGCCACAAT 1

RESULT 312
ABK25404
ID ABK25404 standard; DNA; 17 BP.
XX
AC ABK25404;
XX
DT 09-APR-2002 (first entry)
XX
DE Male-sterile plant producing genome altering oligonucleotide #304.
XX
KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW o-methyl modification; LNA modification; phosphorothioate linkage;
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW amino acid over production; herbicide resistance; glyphosate resistance;
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW porphyric herbicide resistance; triazine resistance; disease resistance;
KW modified oil production; modified starch production; waxy starch;
KW altered floral morphology; male-sterile plant; albino mutant;
KW modified fatty acid content; reduced palmitate production; albino plant;
KW increased stearate production; reduced linolenic acid production;
KW photosynthetic process.
XX
OS Zea mays.
OS Synthetic.
XX
PN WQ200192512-A2.
XX
PD 06-DEC-2001.
XX
PF 01-JUN-2001; 2001WO-US017672.
XX
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
PR 27-MAR-2001; 2001US-00818875.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC, Kim J;
XX
DR WPI; 2002-106307/14.
XX
PT New oligonucleotides with modified nuclease-resistant termini, useful for
PT creating plants with desired phenotypes, e.g. stress tolerance, improved
PT nutritional value, herbicide or disease resistance, or modified oil
PT production.
XX
PS Claim 7; Page 87; 220pp; English.
XX
CC The invention relates to an oligonucleotide for targeted alteration of a
CC genetic sequence, which comprises a single-stranded oligonucleotide
CC having a DNA domain. The DNA domain has at least one mismatch with
CC respect to the genetic sequence to be altered and further comprises
CC chemical modifications of the oligonucleotide. The chemical modifications
CC consist of o-methyl modification, an LNA modification, two or more
CC phosphorothioate linkages on a terminus, or a combination of any two or
CC more of these modifications. The oligonucleotides are useful for
CC directing repair or alteration of plant genetic information. The
CC oligonucleotides are particularly useful for creating plants with desired
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC nutritional value (e.g. altering amino acid content of plants or
CC conferring amino acid over production), herbicide resistance (e.g.
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC resistance, porphyric herbicide resistance or triazine resistance),
CC disease resistance, modified oil production, modified starch production
CC (e.g. increased starch or production of waxy starch), altered floral
CC morphology (e.g. male-sterile plants) or modified fatty acid content
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC The oligonucleotides are also useful for producing albino mutants for the
CC analysis of photosynthetic processes. This sequence represents a genome
CC altering oligonucleotide of the invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 540 CTGCTCCTAGGCCT 553
||||||||||| |||
Db 1 CTGCTCCTAGACCT 14

RESULT 313
ABK25403/c
ID ABK25403 standard; DNA; 17 BP.
XX

AC ABK25403;
XX
DT 09-APR-2002 (first entry)
XX
DE Male-sterile plant producing genome altering oligonucleotide #303.
XX
KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW o-methyl modification; LNA modification; phosphorothioate linkage;
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW amino acid over production; herbicide resistance; glyphosate resistance;
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW porphyric herbicide resistance; triazine resistance; disease resistance;
KW modified oil production; modified starch production; waxy starch;
KW altered floral morphology; male-sterile plant; albino mutant;
KW modified fatty acid content; reduced palmitate production; albino plant;
KW increased stearate production; reduced linolenic acid production;
KW photosynthetic process.
XX
OS Zea mays.
OS Synthetic.
XX
PN WO200192512-A2.
XX
PD 06-DEC-2001.
XX
PF 01-JUN-2001; 2001WO-US017672.
XX
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
PR 27-MAR-2001; 2001US-00818875.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC, Kim J;
XX
DR WPI; 2002-106307/14.
XX
PT New oligonucleotides with modified nuclease-resistant termini, useful for
PT creating plants with desired phenotypes, e.g. stress tolerance, improved
PT nutritional value, herbicide or disease resistance, or modified oil
PT production.
XX
PS Claim 7; Page 87; 220pp; English.
XX
CC The invention relates to an oligonucleotide for targeted alteration of a
CC genetic sequence, which comprises a single-stranded oligonucleotide
CC having a DNA domain. The DNA domain has at least one mismatch with
CC respect to the genetic sequence to be altered and further comprises
CC chemical modifications of the oligonucleotide. The chemical modifications
CC consist of o-methyl modification, an LNA modification, two or more
CC phosphorothioate linkages on a terminus, or a combination of any two or
CC more of these modifications. The oligonucleotides are useful for
CC directing repair or alteration of plant genetic information. The
CC oligonucleotides are particularly useful for creating plants with desired
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC nutritional value (e.g. altering amino acid content of plants or
CC conferring amino acid over production), herbicide resistance (e.g.
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC resistance, porphyric herbicide resistance or triazine resistance),
CC disease resistance, modified oil production, modified starch production
CC (e.g. increased starch or production of waxy starch), altered floral
CC morphology (e.g. male-sterile plants) or modified fatty acid content
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC The oligonucleotides are also useful for producing albino mutants for the
CC analysis of photosynthetic processes. This sequence represents a genome
CC altering oligonucleotide of the invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 540 CTGCTCCTAGGCCT 553
||||||||||| |||
Db 17 CTGCTCCTAGACCT 4

RESULT 314
ABV90400
ID ABV90400 standard; DNA; 17 BP.
XX
AC ABV90400;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1113.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 1113; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

```
  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        744 GTAGGGTCCCAGGG 757
              |||||| |||||||
Db          4 GTAGGGGCCCAGGG 17


RESULT 315
ABV90406
ID   ABV90406 standard; DNA; 17 BP.
XX
AC   ABV90406;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1119.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1119; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 2 A; 5 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 GGGTCCCAGGGTCC 760
              ||| ||||||||||
Db          1 GGGGCCCAGGGTCC 14


RESULT 316
ABL31647/c
ID   ABL31647 standard; DNA; 17 BP.
XX
AC   ABL31647;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 1136.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP004662.
XX
PR   01-JUN-2000; 2000JP-00164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
PT   individuals e.g. by determining immunogenetic differences when
PT   transplanting between them.
XX
PS   Claim 10; Page 308; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class I antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals
XX
SQ   Sequence 17 BP; 3 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        529 CCCAACATCCTCTG 542
              || ||||||||||
Db         17 CCAAACATCCTCTG 4


RESULT 317
```

```
ACC53588/c
ID   ACC53588 standard; DNA; 17 BP.
XX
AC   ACC53588;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #2355.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 584; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        536 TCCTCTGCTCCTAG 549
              ||||||||| ||||
Db         17 TCCTCTGCTTCTAG 4


RESULT 318
ACC49388
ID   ACC49388 standard; DNA; 17 BP.
XX
AC   ACC49388;
XX
DT   24-JUN-2003  (first entry)
XX
DE   Human 5HTT polymorphism T3287C related DNA sequence SEQ ID NO:40.
XX
KW   Human; gene polymorphism; phenotypic response; obesity; NET1; DAT1;
KW   norepinephrine reuptake inhibitor; norepinephrine transporter protein;
KW   dopamine transporter protein; monoamine oxidase B; MAOB; DRD2; 5HTT;
KW   dopamine receptor D2; solute carrier family 6; polymorphic locus; SLC6;
KW   serotonin transporter locus; NR1; N-methyl-D-aspartate receptor;
KW   dopamine reuptake inhibitor; genotyping; weight loss; anorectic;
KW   hypotensive; cardiovascular; monoamine reuptake inhibitor;
KW   chromosome 17q12; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003018843-A1.
XX
PD   06-MAR-2003.
XX
PF   07-AUG-2002; 2002WO-US025060.
XX
PR   21-AUG-2001; 2001US-0313918P.
PR   08-NOV-2001; 2001US-0337819P.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Dow DJ,  Duncan B,  Hughes AR,  Manasco P,  Pillai SG,  Spaulding TC;
PI   Spraggs CF,  Stubbins M,  Xu C;
XX
DR   WPI; 2003-354446/33.
XX
PT   Screening humans to identify those likely to achieve significant weight
PT   loss by genotyping subject to identify polymorphic forms of serotonin
PT   transporter gene, that are more responsive to monoamine reuptake
PT   inhibitors.
XX
PS   Disclosure; Page 19; 205pp; English.
XX
CC   The present invention describes a method for screening a human subject to
CC   aid in predicting a response to weight loss treatment with: (a) a
CC   norepinephrine reuptake inhibitor (I), involves genotyping the subject in
CC   need of treatment at a polymorphic norepinephrine transporter 1 (NET1) or
CC   N-methyl-D-Aspartate receptor (NMDA) receptor (NR1), or serotonin
CC   transporter (5HTT) locus; or (b) a dopamine reuptake inhibitor (II),
CC   involves genotyping the subject in need of treatment at a polymorphic
CC   dopamine transporter (DAT1) locus, where one form of the polymorphic
CC   locus has been associated with increased weight loss in response to
CC   treatment with (I) or (II), compared to weight loss associated with other
CC   polymorphic forms of the locus. (I) and (II) have anorectic, hypotensive
CC   and cardiovascular activities, and are monoamine reuptake inhibitors. The
CC   method is useful for screening a human subject as an aid in predicting a
CC   response to weight loss treatment with a norepinephrine reuptake
CC   inhibitor or dopamine reuptake inhibitor. It is also useful for treating
CC   a human subject with (I) for weight loss, where GW320659 is administered
CC   to subjects having genotype NET1 G155A (A/A), NET1 T342C (C/C), NET1
CC   C120A (A/A), DAT1 VNTR (9,9), DAT VNTR (10,9), NR1 G1001C (G/C), NR1
CC   G6435A (A/A), 5HTT G769 (G/G) and 5HTT G160A (A/A). The present sequence
CC   represents a human 5HTT polymorphism related DNA sequence, which is given
CC   in the exemplification of the present invention
XX
SQ   Sequence 17 BP; 1 A; 9 C; 5 G; 1 T; 0 U; 1 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   81.2%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        551 CCTCCCCAGCGAGCTC 566
              ||||||: |||||| |
Db          2 CCTCCCYGGCGAGCGC 17


RESULT 319
ABT37418/c
ID   ABT37418 standard; DNA; 17 BP.
XX
AC   ABT37418;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 3055.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
```

OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 390; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 536 TCCTCTGCTCCTAG 549
||||||||| ||||
Db 17 TCCTCTGCTTCTAG 4

RESULT 320
ACA07861/c
ID ACA07861 standard; RNA; 17 BP.
XX
AC ACA07861;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating zinzyme substrate #260.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 41; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 1 A; 5 C; 7 G; 0 T; 4 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 777 GAGGGCAGCCCCTC 790
|| ||||||||||
Db 14 GAAGGCAGCCCCTC 1

RESULT 321
ACA06818/c
ID ACA06818 standard; RNA; 17 BP.

XX
AC ACA06818;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #637.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 36; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 777 GAGGGCAGCCCCTC 790
|| ||||||||||
Db 15 GAAGGCAGCCCCTC 2

RESULT 322
ACA07860/c
ID ACA07860 standard; RNA; 17 BP.
XX
AC ACA07860;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating zinzyme substrate #259.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 41; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or

```
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel enzymatic
CC   nucleic acid molecule
XX
SQ   Sequence 17 BP; 1 A; 4 C; 6 G; 0 T; 6 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        777 GAGGGCAGCCCCTC 790
              || ||||||||||
Db         17 GAAGGCAGCCCCTC 4


RESULT 323
ABZ62161
ID   ABZ62161 standard; RNA; 17 BP.
XX
AC   ABZ62161;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human H-Ras DNAzyme target #952.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 58; Page 131; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 3 A; 8 C; 4 G; 0 T; 2 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   78.6%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        558 AGCGAGCTCCTCCC 571
              ||| |||:||:|||
Db          4 AGCCAGCUCCUCCC 17


RESULT 324
ACC63071
ID   ACC63071 standard; DNA; 17 BP.
XX
AC   ACC63071;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 318.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 68; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        679 GACCCCCAGGGCCA 692
              || ||||||||||||
Db          1 GATCCCCAGGGCCA 14
```

```
RESULT 325
ACC66201/c
ID   ACC66201 standard; DNA; 17 BP.
XX
AC   ACC66201;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 3448.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 434; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        708 CGAGTCCCAGGAGA 721
              | ||||||||||||
Db         16 CAAGTCCCAGGAGA 3


RESULT 326
ADB45500
ID   ADB45500 standard; DNA; 17 BP.
XX
AC   ADB45500;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #5823.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 712; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 4 A; 2 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        586 GTTCTGTTTTTCTA 599
              | ||||||||||||
Db          1 GATCTGTTTTTCTA 14


RESULT 327
ADB44845/c
ID   ADB44845 standard; DNA; 17 BP.
XX
AC   ADB44845;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #5168.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
```

XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 636; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 536 TCCTCTGCTCCTAG 549
||||||||| ||||
Db 17 TCCTCTGCTTCTAG 4

RESULT 328
AAT53568
ID AAT53568 standard; RNA; 17 BP.
XX
AC AAT53568;
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 1684).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 202; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 540 CTGCTCCTAGGCCTCCC 556
|:||:| :|| ||:| |
Db 1 CUGCUCGUAGACCUCUC 17

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RESULT 329
AAT53658
ID   AAT53658 standard; RNA; 17 BP.
XX
AC   AAT53658;
XX
DT   25-MAR-2003  (revised)
DT   27-MAR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 2344).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 203; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        540 CTGCTCCTAGGCCTCCC 556
              |:||:| :|| ||:| |
Db          1 CUGCUCGUAGACCUCUC 17


RESULT 330
AAT53743
ID   AAT53743 standard; RNA; 17 BP.
XX
AC   AAT53743;
XX
DT   25-MAR-2003  (revised)
DT   03-APR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 2585).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
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PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 204; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        540 CTGCTCCTAGGCCTCCC 556
              |:||:| :|| ||:| |
Db          1 CUGCUCGUAGACCUCUC 17


RESULT 331
AAX69323/c
ID   AAX69323 standard; RNA; 17 BP.
XX
AC   AAX69323;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #618.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 65; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        865 AGTTGGAACACTTTCCT 881
              || || || ||||||||
Db         17 AGCTGAAATACTTTCCT 1


RESULT 332
AAX74837/c
ID   AAX74837 standard; RNA; 17 BP.
XX
AC   AAX74837;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #365.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
```

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XX
PS   Claim 4; Page 166; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 3 A; 1 C; 8 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        524 ACTTTCCCAACATCCTC 540
              |||||||||| | || |
Db         17 ACTTTCCCAAAAGCCCC 1


RESULT 333
AAX74836/c
ID   AAX74836 standard; RNA; 17 BP.
XX
AC   AAX74836;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #364.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 166; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 4 A; 1 C; 8 G; 0 T; 4 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        525 CTTTCCCAACATCCTCT 541
              |||||||||| | || ||
Db         17 CTTTCCCAAAAGCCCCT 1


RESULT 334
AAX69799
ID   AAX69799 standard; RNA; 17 BP.
XX
AC   AAX69799;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #1094.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 79; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 1 A; 1 C; 0 G; 0 T; 15 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   11.8%;  Pred. No. 2.3e+02;
  Matches    2;  Conservative   12;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        580 ACTTTTGTTCTGTTTTT 596
              ||:::: :: : :::::
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Db          1 ACUUUUUUUUUUUUUUU 17


RESULT 335
AAX71120/c
ID   AAX71120 standard; RNA; 17 BP.
XX
AC   AAX71120;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #132.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 101; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        593 TTTTCTACAACACAGAG 609
              |||||| ||||| | ||
Db         17 TTTTCTCCAACAGATAG 1


RESULT 336
AAX72736
ID   AAX72736 standard; RNA; 17 BP.
XX
AC   AAX72736;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #169.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 127; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        869 GGAACACTTTCCTGAGA 885
              | ||| |:::||:| ||
Db          1 GAAACCCUUUCCUGGGA 17


RESULT 337
AAX72657/c
ID   AAX72657 standard; RNA; 17 BP.
XX
AC   AAX72657;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #90.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
```

XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 4; Page 125; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 623 TGGTTCCTGAGAGAGGC 639
|||| |||| ||||||
Db 17 TGGTCACTGACAGAGGC 1

RESULT 338
AAV10758
ID AAV10758 standard; DNA; 17 BP.
XX
AC AAV10758;
XX
DT 21-JUL-1998 (first entry)
XX
DE Human breast cancer gene CH13-2a12-1 primer SP6.4.
XX
KW Breast cancer; malignant transformation; diagnostic; therapeutic;
KW screening; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9738085-A2.
XX
PD 16-OCT-1997.
XX
PF 09-APR-1997; 97WO-US005930.
XX
PR 10-APR-1996; 96US-0015167P.
PR 05-JUN-1996; 96WO-US009286.
PR 06-JUN-1996; 96US-0019202P.
PR 11-JUL-1996; 96US-00678280.
XX
PA (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.
XX
PI Smith H, Chen L;
XX
DR WPI; 1997-512705/47.
XX
PT Breast cancer genes - used to develop products to design or screen
PT diagnostic reagents or therapeutic compounds.
XX
PS Disclosure; Fig 15; 118pp; English.
XX
CC AAV10748-V10777 are primers used in a method to identify the novel human
CC breast cancer gene CH13-2a12-1 by differential display. The identified
CC genes or fragments of these genes can be used for identifying genes and
CC gene products that are intimately related to malignant transformation or
CC maintenance of the malignant properties of cancer cells. It can also be
CC used to design or screen diagnostic reagents or therapeutic compounds.
CC Kits are included within the scope of the invention
XX
SQ Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 818 GGGTTGGCTGTGTCTCT 834
|| ||| || |||||||
Db 1 GGATTGTCTTTGTCTCT 17

RESULT 339
AAT88304
ID AAT88304 standard; DNA; 17 BP.
XX
AC AAT88304;
XX
DT 22-JAN-1998 (first entry)
XX
DE Oligonucleotide primer O3HCDR33.
XX
KW Oligonucleotide primer; preparation; library; CDR3;
KW complementarity determining region; ss.
XX
OS Synthetic.
XX
PN WO9708320-A1.
XX
PD 06-MAR-1997.
XX
PF 19-AUG-1996; 96WO-EP003647.
XX
PR 18-AUG-1995; 95EP-00113021.
XX
PA (MORP-) MORPHOSYS GES PROTEINOPTIMIERUNG MBH.
XX
PI Knappik A, Pack P, Ilag V, Ge L, Moroney S, Plueckthun A;
XX
DR WPI; 1997-179277/16.
XX
PT Preparation of human derived antibody gene library - using synthetic
PT consensus sequences, and signal consensus antibody gene as universal
PT framework for highly diverse antibody libraries.
XX
PS Example 2; Page 32; 436pp; English.
XX
CC The present sequence is an oligonucleotide primer used in the preparation
CC of complementarity determining region 3 (CDR3) libraries
XX
SQ Sequence 17 BP; 1 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 753 CAGGGTCCCTAGGCCTC 769
|||||| ||| |||| |

```
Db          1 CAGGGTGCCTTGGCCCC 17


RESULT 340
AAX62192/c
ID   AAX62192 standard; RNA; 17 BP.
XX
AC   AAX62192;
XX
DT   16-JUL-1999  (first entry)
XX
DE   Granule bound starch synthase hammerhead substrate SEQ ID NO:67.
XX
KW   Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW   granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
KW   modulation; gene expression; transgenic plant; cleavage; canola plant;
KW   caffeine synthesis; coffee plant; nicotine production; tobacco;
KW   fruit ripening; flower pigmentation; lignin production; ss.
XX
OS   Zea mays.
XX
PN   WO9710328-A2.
XX
PD   20-MAR-1997.
XX
PF   12-JUL-1996;   96WO-US011689.
XX
PR   13-JUL-1995;   95US-0001135P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (DOWC ) DOWELANCO.
XX
PI   Zwick MG,  Edington BE,  Mcswiggen JA,  Merlo PAO,  Guo L,  Skokut TA;
PI   Young SA,  Folkerts O,  Merlo DJ;
XX
DR   WPI; 1997-202224/18.
XX
PT   Ribozyme which modulates plant gene expression - preferably modulates
PT   expression of DELTA-9 desaturase or granule bound starch synthase in
PT   maize or canola.
XX
PS   Claim 41; Page 73; 155pp; English.
XX
CC   The present invention describes an enzymatic nucleic acid molecule (I)
CC   with RNA cleaving activity, which modulates the expression of a plant
CC   gene. Also described is a gene comprising a cDNA sequence encoding maize
CC   Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC   preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC   gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC   modulate caffeine synthesis in a coffee plant, nicotine production in a
CC   tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC   or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC   marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC   plant
XX
SQ   Sequence 17 BP; 5 A; 0 C; 9 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        525 CTTTCCCAACATCCTCT 541
              ||||||| | | |||||
Db         17 CTTTCCCCAAACCCTCT 1


RESULT 341
AAV62212
ID   AAV62212 standard; DNA; 17 BP.
XX
AC   AAV62212;
XX
DT   11-FEB-1999  (first entry)
XX
DE   Probe for BRCA1 (omi1) coding sequence.
XX
KW   BRCA1; mutation detection; disease screening; multiple allele variation;
KW   breast cancer; ovarian cancer; cystic fibrosis; Li-Fraumeni syndrome;
KW   Duchenne muscular dystrophy; Becker muscular dystrophy; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9844157-A2.
XX
PD   08-OCT-1998.
XX
PF   26-MAR-1998;   98WO-US006002.
XX
PR   28-MAR-1997;   97US-00825487.
XX
PA   (ONCO-) ONCORMED INC.
XX
PI   Murphy PD,  White MB;
XX
DR   WPI; 1998-542713/46.
XX
PT   Identifying variations in polynucleotide sequences - using allele
PT   specific hybridisation assay, sequence variation locating assay, and
PT   direct sequencing, in a stepwise procedure.
XX
PS   Example 1; Page 27; 62pp; English.
XX
CC   This sequence represents a probe for a fragment of the DNA encoding the
CC   human BRCA (omi1) protein, and was used to test the method of the
CC   invention. The method is for determining the presence or absence of a
CC   sequence variation in a gene sample, and comprises: (a) performing an
CC   allele specific hybridisation assay for one or more pre-determined
CC   sequence variations; (b) if no pre-determined sequence variation found in
CC   step (a) then performing a sequence variation location assay; (ci) if no
CC   sequence variation found in step (b) then sequencing the gene sample;
CC   (cii) if sequence variation is found in step (b) then targeted
CC   confirmatory sequencing is performed; and (d) determining the presence of
CC   a sequence variation by analysing the sequence(s) obtained in step (ci)
CC   or step (cii) against a reference sample. Alternatively, step (a) or step
CC   (b) is omitted from the method. The invention provides a stepwise and
CC   integrated method for the efficient and accurate detection of variations
CC   in polynucleotide sequences, being directed towards screening for
CC   diseases associated with multiple allele variations, including breast and
CC   ovarian cancer, cystic fibrosis, Duchenne and Becker muscular dystrophy,
CC   and Li-Fraumeni syndrome
XX
SQ   Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        706 AGCGAGTCCCAGGAGAG 722
              || || |||||||| ||
Db          1 AGAGAATCCCAGGACAG 17


RESULT 342
AAV94630
ID   AAV94630 standard; RNA; 17 BP.
XX
AC   AAV94630;
XX
DT   24-FEB-1999  (first entry)
XX
DE   Human IL-2 receptor g-chain substrate position 337.
XX
KW   Human; IL-2 receptor g-chain; interleukin 2 receptor gamma chain;
KW   hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;
KW   autoimmune disease; psoriasis; allergy; inflammatory disease;
```

KW graft rejection; ss.
XX
OS Homo sapiens.
XX
PN WO9824913-A2.
XX
PD 11-JUN-1998.
XX
PF 02-DEC-1997; 97WO-US021748.
XX
PR 03-DEC-1996; 96US-00758306.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Mcswiggen JA;
XX
DR WPI; 1998-333332/29.
XX
PT Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer,
PT autoimmune disease and allergies.
XX
PS Claim 4; Page 34; 61pp; English.
XX
CC The present sequence invention describes ribozymes targeted to modulate
CC the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA.
CC AAV93889 to AAV94574 represent specifically claimed ribozymes, and
CC AAV94575 to AAV95260 represent specifically claimed substrate sequences
CC from the present invention. The ribozymes can be used for the treatment
CC of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy
CC and other inflammatory conditions. The ribozymes are also used to induce
CC tolerance in a recipient to alloantigen from a donor
XX
SQ Sequence 17 BP; 6 A; 3 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 47.1%; Pred. No. 2.3e+02;
Matches 8; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

```
Qy        835 TTTCTTCTCTGAAGACA 851
              : : ::|:|:||||| |
Db          1 UCUAUUCUCUGAAGAAA 17
```

RESULT 343
AAA22512
ID AAA22512 standard; RNA; 17 BP.
XX
AC AAA22512;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5738.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 54; Page 225; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 5 A; 4 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

```
Qy        516 GTACCAATACTTTCCCA 532
              | | |||:| :::||||
Db          1 GGAGCAAUAGUUUCCCA 17
```

RESULT 344
AAX34382
ID AAX34382 standard; DNA; 17 BP.
XX
AC AAX34382;
XX
DT 06-JUL-1999 (first entry)
XX
DE Wild type BRCA1 exon 20 allele-specific probe 5382WT-1.
XX
KW Primer; PCR; amplification; exon 2; human; BRCA1; BRCA2; allele; probe;
KW hybridisation; detection; mutation; breast; ovarian; cancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9915704-A1.
XX
PD 01-APR-1999.
XX
PF 23-SEP-1998; 98WO-US020256.
XX
PR 23-SEP-1997; 97US-0059729P.
XX
PA (ONCO-) ONCORMED INC.

XX
PI Rabin MB, Farrow J;
XX
DR WPI; 1999-254727/21.
XX
PT Detection of BRCA1 and BRCA2 gene mutations in a single hybridization
PT step.
XX
PS Claim 9; Page 16; 44pp; English.
XX
CC The invention relates to the use of allele-specific oligonucleotides
CC AAX34376-X34391 as probes for the detection of mutant BRCA1 and BRCA2
CC genes. The probes are immobilised on a membrane and labelled target
CC nucleotide sequences, which hybridise to the probes, are detected after a
CC single hybridization step. The method and allele-specific
CC oligonucleotides are used to detect gene mutations that predispose
CC individuals to breast and ovarian cancer
XX
SQ Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 706 AGCGAGTCCCAGGAGAG 722
|| || |||||||| ||
Db 1 AGAGAATCCCAGGACAG 17

RESULT 345
AAA25560/c
ID AAA25560 standard; DNA; 17 BP.
XX
AC AAA25560;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2058.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
PR 23-JUN-1998; 98US-00103636.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
PT New nucleic acids that interact, and optionally cleave, target sequences,
PT used to treat cancer.
XX
PS Claim 77; Page 83; 148pp; English.
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA24748 to AAA25992 represent their corresponding target sequences.
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC sequences, and AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 5 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 533 ACATCCTCTGCTCCTAG 549
||||| ||| ||||||
Db 17 ACATCGTCTAGTCCTAG 1

RESULT 346
AAF04292/c
ID AAF04292 standard; DNA; 17 BP.
XX
AC AAF04292;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #1808.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 4; Page 97; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 8 A; 4 C; 1 G; 4 T; 0 U; 0 Other;

```
  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        865 AGTTGGAACACTTTCCT 881
              ||||||||  | |||  ||
Db         17 AGTTGGAAGATTTTTCT 1


RESULT 347
AAF04740/c
ID   AAF04740 standard; DNA; 17 BP.
XX
AC   AAF04740;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2256.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 4; Page 107; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 8 A; 4 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        865 AGTTGGAACACTTTCCT 881
              ||||||||  | |||  ||
Db         17 AGTTGGAAGATTTTTCT 1


RESULT 348
AAF05409
ID   AAF05409 standard; DNA; 17 BP.
XX
AC   AAF05409;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2628.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 18; Page 116; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        537 CCTCTGCTCCTAGGCCT 553
              ||  |||||||||  |||
Db          1 CCAGTGCTCCTAGACCT 17


RESULT 349
AAI65850
ID   AAI65850 standard; DNA; 17 BP.
XX
AC   AAI65850;
XX
DT   03-JAN-2002  (first entry)
XX
DE   Nucleotide sequence of triplex forming oligonucleotide for Hprt gene.
XX
KW   DNA-modifying molecule; DNA repair-deficient cell; transgenic cell;
KW   disease model; Hprt gene; triplex forming oligonucleotide; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .17
FT                   /*tag=  b
FT                   /note= "each residue has a 2'-O methyl sugar
FT                   modification"
FT   modified_base   1
FT                   /*tag=  a
FT                   /note= "psoralen attached by a C6-linker"
FT   modified_base   4
FT                   /*tag=  c
FT                   /note= "methylated at 5' position"
FT   modified_base   6
```

```
FT                   /*tag=  d
FT                   /note= "methylated at 5' position"
FT   modified_base   13
FT                   /*tag=  e
FT                   /note= "methylated at 5' position"
FT   modified_base   15. .17
FT                   /*tag=  f
FT                   /note= "thioated residues"
FT   modified_base   16
FT                   /*tag=  g
FT                   /note= "methylated at 5' position"
XX
PN   WO200173001-A2.
XX
PD   04-OCT-2001.
XX
PF   22-MAR-2001; 2001WO-US009218.
XX
PR   24-MAR-2000; 2000US-0191996P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Seidman MM,  Majumdar A;
XX
DR   WPI; 2001-616491/71.
XX
PT   Modifying nucleotide sequence, including recombination of genes in (non-
PT   )human cell, comprises introducing DNA-modifying molecule into cell cycle
PT   synchronized cell.
XX
PS   Example 2; Fig 1; 67pp; English.
XX
CC   The specification describes a method for modifying a nucleotide sequence
CC   in the genome of a cell. The method comprises providing a cell and a DNA-
CC   modifying molecule, manipulating the cell to generate a synchronized cell
CC   and contacting the synchronized cell with the DNA-modifying molecule
CC   under conditions such that a modification in the nucleotide sequence is
CC   produced. The method is useful for modifying nucleotide sequences in the
CC   genome of a human or non-human cell including a fertilized egg cell from
CC   an animal such as sheep, pig, rabbit, cattle and a mouse cell such as
CC   blastomere, eight-cell embryo cell, blastocoele, midgestation embryo cell
CC   and embryonic stem cell. The cell is preferably DNA repair-deficient. The
CC   method is useful for introducing a modification into the genome of a cell
CC   for determining the effect of the modification on the cell. The method
CC   generates transgenic cells and animals useful as models for diseases, and
CC   for screening therapeutic agents. The method also facilitates targeted
CC   recombination for producing gene knockout organisms and/or replacement of
CC   detective genes with non-defective genes. Further the method is useful
CC   for determining the function of a gene of unknown function. AAI65848-49
CC   represent target sequences, derived from exon 4 and exon 5 of the chinese
CC   hamster Hprt gene. The sequence is modified using the method of the
CC   invention by AAI65850-54, which represent triplex forming
CC   oligonucleotides
XX
SQ   Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        826 TGTGTCTCTTTTCTTCT 842
              | | ||| |||||||||
Db          1 TTTCTCTTTTTTCTTCT 17


RESULT 350
AAH95805/c
ID   AAH95805 standard; RNA; 17 BP.
XX
AC   AAH95805;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human Chk1 ribozyme substrate SEQ ID NO: 1230.
XX
KW   Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
KW   RNA cleavage; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157206-A2.
XX
PD   09-AUG-2001.
XX
PF   02-FEB-2001; 2001WO-US003504.
XX
PR   03-FEB-2000; 2000US-0179983P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (FATT/) FATTAEY A R.
XX
PI   Fattaey AR,  Jarvis T,  Mcswiggen J,  Booher RN,  Holman PS;
XX
DR   WPI; 2001-496922/54.
XX
PT   Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
PT   molecules, which downregulates expression of a checkpoint kinase-1 gene,
PT   useful for treating colorectal, lung, breast or prostate cancers.
XX
PS   Claim 4; Page 89; 115pp; English.
XX
CC   The present invention provides nucleic acid molecules capable of
CC   downregulating the expression of the human checkpoint kinase-1 (Chk1)
CC   gene. These may be antisense or ribozyme sequences, and are useful in the
CC   treatment of diseases associated with conditions affected by Chk1 levels,
CC   including cancer. The present sequence is an oligonucleotide described in
CC   the exemplification of the invention
XX
SQ   Sequence 17 BP; 4 A; 2 C; 8 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        802 GCTCTCCTCCAACTCAG 818
              |||||||||||   |||
Db         17 GCTCTCCTCCACTACAG 1


RESULT 351
ABK03533/c
ID   ABK03533 standard; RNA; 17 BP.
XX
AC   ABK03533;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Zinzyme #84.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
```

```
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L, Mcswiggen J, Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 30; Page 155; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is a zinzyme molecule of the invention
XX
SQ   Sequence 17 BP; 5 A; 7 C; 3 G; 0 T; 2 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        621 CCTGGTTCCTGAGAGAG 637
              ||||||| ||||  |||
Db         17 CCTGGTTGCTGATGGAG 1


RESULT 352
ABK00237/c
ID   ABK00237 standard; RNA; 17 BP.
XX
AC   ABK00237;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Hammerhead Ribozyme #237.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L, Mcswiggen J, Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 88; Page 69; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
```

```
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is a hammerhead ribozyme of the invention
XX
SQ   Sequence 17 BP; 14 A; 0 C; 2 G; 0 T; 1 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        582 TTTTGTTCTGTTTTTCT 598
              |||| |||| ||||| |
Db         17 TTTTCTTCTATTTTTTT 1


RESULT 353
ABK03330/c
ID   ABK03330 standard; RNA; 17 BP.
XX
AC   ABK03330;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Inozyme #281.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 30; Page 150; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is an inozyme of the invention
XX
SQ   Sequence 17 BP; 6 A; 5 C; 5 G; 0 T; 1 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        615 ACTCTGCCTGGTTCCTG 631
              | ||| ||||||| |||
Db         17 AGTCTCCCTGGTTGCTG 1


RESULT 354
ABN07400/c
ID   ABN07400 standard; DNA; 17 BP.
XX
AC   ABN07400;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7392.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
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PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7392; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        862 TCCAGTTGGAACACTTT 878
              ||||||  |||  |  ||||
Db         17 TCCAGTGGGATCCCTTT 1


RESULT 355
ABN08862/c
ID   ABN08862 standard; DNA; 17 BP.
XX
AC   ABN08862;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8854.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8854; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        656 TCAGTCTTTCTCGAAGC 672
              ||||  ||  ||  ||||||
Db         17 TCAGGCTGTCCCGAAGC 1


RESULT 356
ABN00237
ID   ABN00237 standard; DNA; 17 BP.
XX
AC   ABN00237;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:229.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
```

```
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 229; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        798 AAGAGCTCTCCTCCAAC 814
              ||||||  ||||  ||| |
Db          1 AAGAGCCCTCCACCATC 17


RESULT 357
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ABN00948
ID   ABN00948 standard; DNA; 17 BP.
XX
AC   ABN00948;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:940.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 940; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
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  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        676 GCGGACCCCCAGGGCCA 692
              || || |||||||||  |
Db          1 GCTGAGCCCCAGGGCAA 17
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RESULT 358
ABN06057/c
ID ABN06057 standard; DNA; 17 BP.
XX
AC ABN06057;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6049.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 6049; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 7 A; 1 C; 6 G; 3 T; 0 U; 0 Other;

```
  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCTCTGAA 847
              ||| |||||||||  ||
Db         17 CTCCTTTCTTCTCGAAA 1
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RESULT 359
ABN07672/c
ID ABN07672 standard; DNA; 17 BP.
XX
AC ABN07672;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7664.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 7664; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-

```
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 7 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        806 TCCTCCAACTCAGGGTT 822
              | ||||| |||| ||||
Db         17 TTCTCCAGCTCATGGTT 1


RESULT 360
ABN08912
ID   ABN08912 standard; DNA; 17 BP.
XX
AC   ABN08912;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8904.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8904; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        704 CCAGCGAGTCCCAGGAG 720
              ||  |||||||||| ||
Db          1 CCTCCGAGTCCCAGCAG 17


RESULT 361
ABN08917
ID   ABN08917 standard; DNA; 17 BP.
XX
AC   ABN08917;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8909.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
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PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8909; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 4 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        709 GAGTCCCAGGAGAGTGA 725
              ||||||||| || | ||
Db          1 GAGTCCCAGCAGCGGGA 17


RESULT 362
ABN08916
ID   ABN08916 standard; DNA; 17 BP.
XX
AC   ABN08916;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8908.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8908; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        708 CGAGTCCCAGGAGAGTG 724
              ||||||||| || | |
Db          1 CGAGTCCCAGCAGCGGG 17


RESULT 363
ABN00669/c
ID   ABN00669 standard; DNA; 17 BP.
XX
AC   ABN00669;
XX
DT   29-MAY-2002  (first entry)
XX
```

```
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:661.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
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PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 661; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        815 TCAGGGTTGGCTGTGTC 831
              || || ||||||| |||
Db         17 TCTGGCTTGGCTGAGTC 1


RESULT 364
ABN09571
ID   ABN09571 standard; DNA; 17 BP.
XX
AC   ABN09571;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9563.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 9563; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
```

```
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 7 A; 6 C; 1 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        515 AGTACCAATACTTTCCC 531
              ||||| ||||| | |||
Db          1 AGTACAAATACATCCCC 17


RESULT 365
ABN07398/c
ID   ABN07398 standard; DNA; 17 BP.
XX
AC   ABN07398;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7390.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7390; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        864 CAGTTGGAACACTTTCC 880
              |||| ||| | ||||||
Db         17 CAGTGGGATCCCTTTCC 1


RESULT 366
ABN06056/c
ID   ABN06056 standard; DNA; 17 BP.
XX
AC   ABN06056;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6048.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
```

```
PS   Disclosure; SEQ ID NO 6048; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        832 TCTTTTCTTCTCTGAAG 848
              || |||||||||  |||
Db         17 TCCTTTCTTCTCGAAAG 1


RESULT 367
ABN07401/c
ID   ABN07401 standard; DNA; 17 BP.
XX
AC   ABN07401;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7393.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7393; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        861 CTCCAGTTGGAACACTT 877
              ||||||| ||| | |||
Db         17 CTCCAGTGGGATCCCTT 1


RESULT 368
ABN06109
ID   ABN06109 standard; DNA; 17 BP.
XX
AC   ABN06109;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6101.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
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PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6101; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        779 GGGCAGCCCCTCTGGTG 795
              | ||||||||||  |||
Db          1 GAGCAGCCCCTCCAGTG 17


RESULT 369
ABN09223
ID   ABN09223 standard; DNA; 17 BP.
XX
AC   ABN09223;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9215.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 9215; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        535 ATCCTCTGCTCCTAGGC 551
              |||||| ||||| || |
Db          1 ATCCTCAGCTCCCAGCC 17


RESULT 370
ABN07399/c
ID   ABN07399 standard; DNA; 17 BP.
XX
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```
AC   ABN07399;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7391.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7391; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
    Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        863 CCAGTTGGAACACTTTC 879
              ||||| ||| | |||||
Db         17 CCAGTGGGATCCCTTTC 1


RESULT 371
ABN08909
ID   ABN08909 standard; DNA; 17 BP.
XX
AC   ABN08909;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8901.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8901; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
```

CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 3 A; 9 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 701 CCTCCAGCGAGTCCCAG 717
|| || ||||||||||
Db 1 CCACCTCCGAGTCCCAG 17

RESULT 372
ABN00670/c
ID ABN00670 standard; DNA; 17 BP.
XX
AC ABN00670;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:662.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 662; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 814 CTCAGGGTTGGCTGTGT 830
||| || ||||||| ||
Db 17 CTCTGGCTTGGCTGAGT 1

RESULT 373
ABN00557/c
ID ABN00557 standard; DNA; 17 BP.
XX
AC ABN00557;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:549.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX

PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 549; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 4 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 542 GCTCCTAGGCCTCCCCA 558
|||||| ||||| | ||
Db 17 GCTCCTGGGCCTTCTCA 1

RESULT 374
ABN00234
ID ABN00234 standard; DNA; 17 BP.
XX
AC ABN00234;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:226.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 226; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 8 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 795 GCCAAGAGCTCTCCTCC 811
| ||||||| |||| ||
Db 1 GACAAGAGCCCTCCACC 17

RESULT 375
ABN05888
ID ABN05888 standard; DNA; 17 BP.
XX
AC ABN05888;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:5880.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX

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PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 5880; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 10 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        551 CCTCCCCAGCGAGCTCC 567
              ||||||||| || | ||
Db          1 CCTCCCCAGGGACCACC 17


RESULT 376
ABN07673/c
ID   ABN07673 standard; DNA; 17 BP.
XX
AC   ABN07673;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7665.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
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PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7665; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        805 CTCCTCCAACTCAGGGT 821
              || ||||| |||| |||
Db         17 CTTCTCCAGCTCATGGT 1
```

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RESULT 377
ABN07674/c
ID   ABN07674 standard; DNA; 17 BP.
XX
AC   ABN07674;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7666.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7666; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        804 TCTCCTCCAACTCAGGG 820
              ||| ||||| |||| ||
Db         17 TCTTCTCCAGCTCATGG 1


RESULT 378
ABQ63784/c
ID   ABQ63784 standard; DNA; 17 BP.
XX
AC   ABQ63784;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Human KTOM1a portion (ABQ63232) probe # 497.
XX
KW   Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW   gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW   kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224750-A2.
XX
PD   28-MAR-2002.
XX
PF   21-SEP-2001; 2001WO-US029656.
XX
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   28-AUG-2001; 2001US-0315676P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Zhang J;
XX
DR   WPI; 2002-479509/51.
XX
PT   New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT   acids encoding the protein, useful for treating subjects having defects
PT   in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT   e.g., liver or bone.
XX
PS   Example 2; Page 222; 418pp; English.
XX
CC   The invention relates to a novel isolated nucleic acid encoding human
CC   KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC   invention has cytostatic activity. The nucleotide may have a use in gene
CC   therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC   monitor a disease caused by altered expression of human KTOM1.
CC   Compositions comprising the nucleic acids, proteins or antibodies may be
CC   used to treat subjects having defects in KTOM1 which can manifest as
CC   cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC   heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC   function. The sequence represents a probe used in the invention to scan
CC   the nt 1-1001 portion of human KTOM1a (ABQ63232)
```

```
XX
SQ   Sequence 17 BP; 4 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCTCT 791
              ||||| | ||| |||||
Db         17 CTGAGAGGAGCTCCTCT 1


RESULT 379
ABQ63333
ID   ABQ63333 standard; DNA; 17 BP.
XX
AC   ABQ63333;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Human KTOM1a portion (ABQ63232) probe # 46.
XX
KW   Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW   gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW   kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224750-A2.
XX
PD   28-MAR-2002.
XX
PF   21-SEP-2001; 2001WO-US029656.
XX
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   28-AUG-2001; 2001US-0315676P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Zhang J;
XX
DR   WPI; 2002-479509/51.
XX
PT   New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT   acids encoding the protein, useful for treating subjects having defects
PT   in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT   e.g., liver or bone.
XX
PS   Example 2; Page 163; 418pp; English.
XX
CC   The invention relates to a novel isolated nucleic acid encoding human
CC   KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC   invention has cytostatic activity. The nucleotide may have a use in gene
CC   therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC   monitor a disease caused by altered expression of human KTOM1.
CC   Compositions comprising the nucleic acids, proteins or antibodies may be
CC   used to treat subjects having defects in KTOM1 which can manifest as
CC   cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC   heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC   function. The sequence represents a probe used in the invention to scan
CC   the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
SQ   Sequence 17 BP; 1 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        751 CCCAGGGTCCCTAGGCC 767
              ||||| |||||  ||||
Db          1 CCCAGCGTCCCGTGGCC 17


RESULT 380
ABQ63752/c
ID   ABQ63752 standard; DNA; 17 BP.
XX
AC   ABQ63752;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Human KTOM1a portion (ABQ63232) probe # 465.
XX
KW   Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW   gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW   kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224750-A2.
XX
PD   28-MAR-2002.
XX
PF   21-SEP-2001; 2001WO-US029656.
XX
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   28-AUG-2001; 2001US-0315676P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Zhang J;
XX
DR   WPI; 2002-479509/51.
XX
PT   New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT   acids encoding the protein, useful for treating subjects having defects
PT   in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT   e.g., liver or bone.
XX
PS   Example 2; Page 218; 418pp; English.
XX
CC   The invention relates to a novel isolated nucleic acid encoding human
CC   KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC   invention has cytostatic activity. The nucleotide may have a use in gene
CC   therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC   monitor a disease caused by altered expression of human KTOM1.
CC   Compositions comprising the nucleic acids, proteins or antibodies may be
CC   used to treat subjects having defects in KTOM1 which can manifest as
CC   cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC   heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
```

```
CC   function. The sequence represents a probe used in the invention to scan
CC   the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
SQ   Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        805 CTCCTCCAACTCAGGGT 821
              || || ||| |||||||
Db         17 CTGCTGCAAATCAGGGT 1


RESULT 381
ABV79209/c
ID   ABV79209 standard; DNA; 17 BP.
XX
AC   ABV79209;
XX
DT   03-JAN-2003  (first entry)
XX
DE   Human HTPL scanning oligonucleotide SEQ ID 455.
XX
KW   Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW   human testis expressed Patched like protein; testis; adrenal; liver;
KW   male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW   prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1229046-A2.
XX
PD   07-AUG-2002.
XX
PF   28-JAN-2002; 2002EP-00001167.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   23-MAY-2001; 2001US-00864761.
PR   09-OCT-2001; 2001US-0327898P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Zhan J;
XX
DR   WPI; 2002-676582/73.
XX
PT   Novel isolated human testis expressed Patched like protein (HTPL), useful
PT   for identifying agonist and antagonist and specific binding partners, and
PT   for treating subjects having defects in HTPL.
XX
PS   Example 2; Page 123; 718pp; English.
XX
CC   The present invention relates to human testis expressed Patched like
CC   protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC   has two isoforms, with a few single base pair differences between the
CC   two. One of the single base pair changes introduces a premature stop
CC   codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC   shares an overall structure organisation with the Patched protein. The
CC   shared structural features strongly imply that HTPL plays a role similar
CC   to that of Patched, and is a potential tumour suppressor. HTPL is
CC   important in regulating male germ cell development, and the HTPL gene was
CC   mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC   useful for diagnosing a disorder caused by mutation in HTPL, and in
CC   therapy and manufacture of a medicament for treatment or prevention of
CC   such disorder associated with decreased expression or activity of human
CC   HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC   foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC   skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC   clinically useful diagnostic markers and potenial therapeutic agents for
CC   male infertility and cancer. The present oligonucleotide was used in an
CC   example from the invention
XX
SQ   Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        777 GAGGGCAGCCCCTCTGG 793
              ||  |||||||||||| |
Db         17 GACAGCAGCCCCTCTAG 1


RESULT 382
ABS98234/c
ID   ABS98234 standard; DNA; 17 BP.
XX
AC   ABS98234;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human lactoferrin (LTF) gene sequencing primer #17.
XX
KW   Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW   cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW   adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW   aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW   cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW   epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW   glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW   HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW   NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW   UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW   UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW   multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW   multidrug resistance associated protein 3; cancer; prostate;
KW   acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW   altered drug metabolism; cardiovascular function; colorectal tumour;
KW   central nervous system; pulmonary; immunological; sequencing.
XX
OS   Homo sapiens.
XX
PN   WO200257410-A2.
XX
PD   25-JUL-2002.
XX
PF   28-NOV-2001; 2001WO-US044838.
XX
PR   28-NOV-2000; 2000US-00724389.
XX
PA   (DNAS-) DNA SCI LAB INC.
XX
PI   Guida M,  Hall J;
XX
DR   WPI; 2002-698522/75.
XX
PT   Isolated nucleic acid molecules having polymorphisms in known human genes
PT   e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT   for locating, identifying and characterizing the genes responsible for
PT   disorder-related traits.
XX
PS   Example 23; Page 147; 714pp; English.
XX
CC   This invention relates to the sequence of an isolated nucleic acid
CC   molecule comprising at least one base variation from that of a known
CC   human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC   cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC   aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC   (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC   inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
```

CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterising the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC sequencing primer used to sequence the polymorphic genes of the invention
XX
SQ Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        641 CCTAAGTCACAGACCTC 657
              ||| |||||||| | ||
Db         17 CCTCAGTCACAGGCTTC 1
```

RESULT 383
ABL01751/c
ID ABL01751 standard; DNA; 17 BP.
XX
AC ABL01751;
XX
DT 18-MAR-2002 (first entry)
XX
DE Human MSH2 (hMSH2) intronic sequence SEQ ID NO:104.
XX
KW Human; MLH1; MSH2; hMLH1; hMSH2; variant gene; diagnosis; HNPCC;
KW hereditary non-polyposis colorectal cancer; ds.
XX
OS Homo sapiens.
XX
PN US2001044936-A1.
XX
PD 22-NOV-2001.
XX
PF 22-OCT-1999; 99US-00426548.
XX
PR 22-OCT-1998; 98US-0105180P.
XX
PA (ROBB/) ROBBINS D.
PA (LING/) LIN-GOERKE J L.
PA (LING/) LING J C.
XX
PI Robbins D, Lin-Goerke JL, Ling JC;
XX
DR WPI; 2002-105577/14.
XX
PT New variants of the human MLH1 and MSH2 genes for diagnosing or
PT determining a predisposition for hereditary non-polyposis colorectal
PT cancer.
XX
PS Disclosure; Page 4; 38pp; English.
XX
CC The present invention describes a variant human MLH1 or MSH2 gene. Also
CC described are: (1) a method for diagnosing or predicting susceptibility
CC to hereditary non-polyposis colorectal cancer (HNPCC), comprising
CC screening a DNA sample for the variant MLH1 or MSH2 gene where presence
CC of the variant indicates presence of, or susceptibility to HNPCC; (2) a
CC method of identifying mutants in splice donor or acceptor sites of a
CC human MLH1 gene, comprising sequencing splice donor or acceptor sites of
CC the gene with intronic primers for the human MLH1 gene and analysing the
CC sequence to identify any mutants; (3) a method of identifying mutants in
CC splice donor or acceptor sites of a human MSH2 gene, comprising
CC sequencing splice donor or acceptor sites of the gene with intronic
CC primers for the human MSH2 gene and analysing the sequence to identify
CC any mutants; and (4) a transgenic model system for colorectal cancer
CC comprising cells expressing the variant MLH1 or MSH2 gene. The hMLH1 and
CC hMSH2 variants are used to diagnose or determine a patients
CC susceptibility to hereditary non-polyposis colorectal cancer. ABL01648 to
CC ABL01745 and ABL01746 to ABL01831 represent hMLH1 and hMSH2 gene
CC fragments from the present invention. ABL01832 to ABL01839 represent
CC mutagenic primers used in the exemplification of the present invention
XX
SQ Sequence 17 BP; 1 A; 3 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        551 CCTCCCCAGCGAGCTCC 567
              |||||||||  || ||
Db         17 CCTCCCCAGCACGCGCC 1
```

RESULT 384
AAS99479/c
ID AAS99479 standard; DNA; 17 BP.
XX
AC AAS99479;
XX
DT 12-MAR-2002 (first entry)
XX
DE Tuberculosis bacteria group probe #2.
XX
KW Drug resistance detection; mycobacterial species identification; probe;
KW oligonucleotide chip; rpoB; sputum; blood; cerebrospinal fluid; ss;
KW primer.
XX
OS Mycobacterium marinum.
XX
PN WO200192573-A1.
XX
PD 06-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-KR000904.
XX
PR 30-MAY-2000; 2000KR-00029369.
XX
PA (BIOM-) BIOMEDLAB CO LTD.
XX
PI Kim H, Kim N, Yoon S, Kim J, Park M;
XX
DR WPI; 2002-075472/10.
XX
PT Kit for mycobacterial species identification and drug resistance
PT detection, has oligonucleotide chip with species identification probe, a
PT mycobacterial drug-resistance detection probe, and its contrast group
PT probe.
XX
PS Claim 21; Page 12; 74pp; English.

```
XX
CC   The invention relates to a diagnostic kit for mycobacterial species
CC   identification and drug resistance detection comprising an
CC   oligonucleotide chip including a species identification probe, a
CC   mycobacterial drug-resistance detection probe, a contrast group probe
CC   corresponding to each drug resistance detection probe, and a marker for
CC   detecting a hybridisation of the oligonucleotide chip and a specimen. The
CC   identification probe is comprised of species-specific DNA sequences of
CC   mycobacterial rpoB gene and the detection probe is comprised of one or
CC   more modified codons of mycobacterial rpoB gene. The method involves
CC   amplifying rpoB gene fragments of specimen by Polymerase Chain Reaction
CC   (PCR) and discriminating species by fluorescent intensity corresponding
CC   to a particular species. The specimen is preferably uncultured sputum,
CC   blood or cerebrospinal fluid of a patient. Sequences AAS99478-AAS99569
CC   represent mycobacterium species identification probes and primers of the
CC   invention
XX
SQ   Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        618 CTGCCTGGTTCCTGAGA 634
              ||| ||||||||  |||
Db         17 CTGGCTGGTTCCGAAGA 1


RESULT 385
ABK19044/c
ID   ABK19044 standard; RNA; 17 BP.
XX
AC   ABK19044;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG DNAzyme target sequence Seq ID No 1691.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 107; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        652 GACCTCAGTCTTTCTCG 668
              | || |||||| |||||
Db         17 GGCCACAGTCTCTCTCG 1


RESULT 386
ABK18572/c
ID   ABK18572 standard; RNA; 17 BP.
XX
AC   ABK18572;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG G-cleaver ribozyme target sequence Seq ID No 1219.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
```

```
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 81; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 7 A; 1 C; 4 G; 0 T; 5 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        526 TTTCCCAACATCCTCTG 542
              |||  ||||||| ||||
Db         17 TTTATCAACATCATCTG 1


RESULT 387
ABS74900
ID   ABS74900 standard; DNA; 17 BP.
XX
AC   ABS74900;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 426.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 131; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 0 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTCTTC 841
              |||||  |||| |||||
Db          1 CTGTGGGTCTTCTCTTC 17


RESULT 388
ABS74901
ID   ABS74901 standard; DNA; 17 BP.
XX
AC   ABS74901;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 427.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 131; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
```

```
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 0 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        826 TGTGTCTCTTTTCTTCT 842
              ||||  |||| ||||||
Db          1 TGTGGGTCTTCTCTTCT 17


RESULT 389
ABV91212/c
ID   ABV91212 standard; DNA; 17 BP.
XX
AC   ABV91212;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1925.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1925; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        777 GAGGGCAGCCCCTCTGG 793
              ||||| | ||||| |||
Db         17 GAGGGGATCCCCTGTGG 1


RESULT 390
ABV90001
ID   ABV90001 standard; DNA; 17 BP.
XX
AC   ABV90001;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 714.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 714; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
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CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        836 TTCTTCTCTGAAGACAG 852
              | |||||| | ||||||
Db          1 TCCTTCTCCGGAGACAG 17


RESULT 391
ABV90004
ID   ABV90004 standard; DNA; 17 BP.
XX
AC   ABV90004;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 717.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 717; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        839 TTCTCTGAAGACAGCGT 855
              ||||| | ||||||| |
Db          1 TTCTCCGGAGACAGCTT 17


RESULT 392
ABV90314/c
ID   ABV90314 standard; DNA; 17 BP.
XX
AC   ABV90314;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1027.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1027; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
```

```
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 9 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCTCTGAA 847
              || | |||||||||  ||
Db         17 CTTTGTTCTTCTCTAAA 1


RESULT 393
ABV90399
ID   ABV90399 standard; DNA; 17 BP.
XX
AC   ABV90399;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1112.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1112; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 2 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        740 CTTGGTAGGGTCCCAGG 756
              ||  |||||| ||||||
Db          1 CTCCGTAGGGGCCCAGG 17


RESULT 394
ABV90658
ID   ABV90658 standard; DNA; 17 BP.
XX
AC   ABV90658;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1371.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
```

```
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1371; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        613 TGACTCTGCCTGGTTCC 629
              | | |||||||||| |||
Db          1 TCAGTCTGCCTGGCTCC 17


RESULT 395
ABV91175
ID   ABV91175 standard; DNA; 17 BP.
XX
AC   ABV91175;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1888.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1888; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        753 CAGGGTCCCTAGGCCTC 769
              || ||||| | ||||||
Db          1 CATGGTCCTTCGGCCTC 17


RESULT 396
ABV89332/c
ID   ABV89332 standard; DNA; 17 BP.
XX
AC   ABV89332;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 45.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
```

```
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 45; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        783 AGCCCCTCTGGTGCCAA 799
              ||| || ||| ||||||
Db         17 AGCGCCGCTGCTGCCAA 1


RESULT 397
ABV91174
ID   ABV91174 standard; DNA; 17 BP.
XX
AC   ABV91174;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1887.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1887; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        752 CCAGGGTCCCTAGGCCT 768
              ||| ||||| | |||||
Db          1 CCATGGTCCTTCGGCCT 17


RESULT 398
ABL31366
ID   ABL31366 standard; DNA; 17 BP.
XX
AC   ABL31366;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 855.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP004662.
XX
PR   01-JUN-2000; 2000JP-00164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
```

```
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
PT   individuals e.g. by determining immunogenetic differences when
PT   transplanting between them.
XX
PS   Claim 10; Page 255; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class I antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals
XX
SQ   Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTCTTC 841
              ||| || || |||||||
Db          1 CTGAGTGTCATTTCTTC 17


RESULT 399
ABL31114
ID   ABL31114 standard; DNA; 17 BP.
XX
AC   ABL31114;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 603.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP004662.
XX
PR   01-JUN-2000; 2000JP-00164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
PT   individuals e.g. by determining immunogenetic differences when
PT   transplanting between them.
XX
PS   Claim 10; Page 207; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class I antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals
XX
SQ   Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTCTTC 841
              ||| || || |||||||
Db          1 CTGAGTGTCATTTCTTC 17


RESULT 400
ABK56127
ID   ABK56127 standard; RNA; 17 BP.
XX
AC   ABK56127;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human CLCA1 gene enzymatic nucleic acid #498.
XX
KW   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW   antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW   chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW   oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW   acetylcysteine.
XX
OS   Homo sapiens.
XX
PN   WO200211674-A2.
XX
PD   14-FEB-2002.
XX
PF   09-AUG-2001; 2001WO-US024970.
XX
PR   09-AUG-2000; 2000US-0224383P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  Mcswiggen J,  Mckenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
DR   WPI; 2002-217145/27.
XX
PT   Enzymatic polynucleotide that down regulates expression of chloride
PT   channel calcium activated gene, useful for treating Chronic obstructive
PT   pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS   Claim 4; Page 61; 152pp; English.
XX
CC   The invention relates to enzymatic nucleic acid molecules that down
CC   regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC   by cleaving RNA derived from the genes. The nucleic acid sequences are
CC   useful as pharmaceutical agents for treating conditions such as chronic
CC   obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC   fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC   that are related to or will respond to the levels of CLCA1 in a cell or
CC   tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC   hence, are useful for treatment of a patient having a condition
CC   associated with the level of CLCA1, where the invention further comprises
CC   the use of one or more therapies under conditions suitable for the
CC   treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC   antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
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CC   nucleic acids of the invention are also used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of CLCA1 RNA in a cell. This sequence represents an
CC   enzymatic nucleic acid molecule of the invention
XX
SQ   Sequence 17 BP; 0 A; 7 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   52.9%;  Pred. No. 2.3e+02;
  Matches    9;  Conservative    5;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        537 CCTCTGCTCCTAGGCCT 553
              | :|:||:||: | ||:
Db          1 CGUCUGCUCCUUGUCCU 17


RESULT 401
ACC52342
ID   ACC52342 standard; DNA; 17 BP.
XX
AC   ACC52342;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #1109.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 296; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        884 GATGCACTTACTTCTCA 900
              ||| |||||| |||| |
Db          1 GATCCACTTAGTTCTTA 17


RESULT 402
ACC54258
ID   ACC54258 standard; DNA; 17 BP.
XX
AC   ACC54258;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #3025.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 738; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 4 A; 2 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        586 GTTCTGTTTTTCTACAA 602
              | ||||||||||  ||
Db          1 GATCTGTTTTTCTTAAA 17


RESULT 403
ACC52942
ID   ACC52942 standard; DNA; 17 BP.
XX
AC   ACC52942;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #1709.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
```

PF 20-JUN-2001; 2001FR-00008139.
XX
PR 20-JUN-2001; 2001FR-00008139.
XX
PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI Tuijnder M, Telerman A, Amson R;
XX
DR WPI; 2003-250498/25.
XX
PT New nucleic acid sequences associated with tumor suppression, regression,
PT apoptosis or virus resistance are useful to diagnose and treat viral
PT disease, development of tumor cells and cell degeneration.
XX
PS Claim 1; Page 435; 798pp; French.
XX
CC This sequence represents an isolated nucleic acid sequence associated
CC with tumour suppression or regression, apoptosis or virus resistance. The
CC invention relates to these sequences or sequences having at least 80%
CC identity to them, and polypeptides encoded by the sequences or
CC polypeptides having 80% identity to the polypeptide sequences. The
CC invention is used to diagnose or treat viral disease or disease
CC characterized by development of tumour cells or cellular degeneration
XX
SQ Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 638 GCTCCTAAGTCACAGAC 654
| ||||||| || ||||
Db 1 GATCCTAAGCCATAGAC 17

RESULT 404
ACA08293/c
ID ACA08293 standard; DNA; 17 BP.
XX
AC ACA08293;
XX
DT 03-JUN-2003 (first entry)
XX
DE Necrosis factor kappa B (NFKB) sub-unit modulating DNAzyme #62.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer;
KW prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;
KW stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;
KW head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;
KW multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy;
KW paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;
KW doxorubin; fluorouracil carboplatin; edatrexate; gemcitabine;
KW radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Synthetic.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 47; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents an enzymatic nucleic acid used to
CC modulate the function of a necrosis factor kappa B sub-unit
XX
SQ Sequence 17 BP; 2 A; 8 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 859 GGCTCCAGTTGGAACAC 875
|| |||||||||||
Db 17 GGGGGCAGTTGGAACAC 1

RESULT 405
ACA06441
ID ACA06441 standard; RNA; 17 BP.
XX
AC ACA06441;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #260.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX

```
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-00864785.
XX
PR   07-DEC-1992;   92US-00987132.
PR   18-MAY-1994;   94US-00245466.
PR   15-AUG-1994;   94US-00291932.
PR   23-DEC-1996;   96US-00777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression of
PT   a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS   Claim 3; Page 31; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel enzymatic
CC   nucleic acid molecule
XX
SQ   Sequence 17 BP; 1 A; 12 C; 2 G; 0 T; 2 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        759 CCCTAGGCCTCCACTTC 775
              ||| |||| |||| : |
Db          1 CCCCCGGCCUCCACCUC 17


RESULT 406
ADA99514/c
ID   ADA99514 standard; DNA; 17 BP.
XX
AC   ADA99514;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ3 scanning oligonucleotide SEQ ID 503.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 503; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 5 A; 4 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        760 CCTAGGCCTCCACTTCT 776
              ||| |||||||| | ||
Db         17 CCTTGGCCTCCAGTGCT 1


RESULT 407
ABZ65360
ID   ABZ65360 standard; RNA; 17 BP.
XX
AC   ABZ65360;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #817.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
```

```
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 4; Page 148; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 5 A; 8 C; 3 G; 0 T; 1 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        686 AGGGCCACACTGTACCC 702
              ||| || ||| |:||||
Db          1 AGGACCCCACAGUACCC 17


RESULT 408
ABZ65331
ID   ABZ65331 standard; RNA; 17 BP.
XX
AC   ABZ65331;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #788.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 4; Page 148; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        757 GTCCCTAGGCCTCCACT 773
              | ||| ||| |:||||:
Db          1 GCCCCCAGGUCUCCACU 17


RESULT 409
ABZ65386
ID   ABZ65386 standard; RNA; 17 BP.
XX
AC   ABZ65386;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #843.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 4; Page 149; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
```

```
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 1 A; 8 C; 4 G; 0 T; 4 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        616 CTCTGCCTGGTTCCTGA 632
              |:|:|||:|  : || ||
Db          1 CUCUGCCUGCUGCCCGA 17


RESULT 410
ABZ65348
ID   ABZ65348 standard; RNA; 17 BP.
XX
AC   ABZ65348;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #805.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 4; Page 148; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 4 A; 8 C; 3 G; 0 T; 2 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        542 GCTCCTAGGCCTCCCCA 558
              ||: | | |||:|||||
Db          1 GCUGCAAAGCCUCCCCA 17


RESULT 411
ABZ64958/c
ID   ABZ64958 standard; RNA; 17 BP.
XX
AC   ABZ64958;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #415.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 4; Page 141; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        859 GGCTCCAGTTGGAACAC 875
              |||| ||||||  ||||
Db         17 GGCTGCAGTTGACACAC 1
```

```
RESULT 412
ACD50454/c
ID   ACD50454 standard; RNA; 17 BP.
XX
AC   ACD50454;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HBV hammerhead ribozyme substrate sequence #73.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 137; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        703 TCCAGCGAGTCCCAGGA 719
              ||||||||   ||||||
Db         17 TCCAGCGATAACCAGGA 1


RESULT 413
ACD55354/c
ID   ACD55354 standard; RNA; 17 BP.
XX
AC   ACD55354;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HBV amberzyme substrate sequence #12.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
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PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 202; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
```

```
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        753 CAGGGTCCCTAGGCCTC 769
              ||||||||| || | ||
Db         17 CAGGGTCCCCAGTCTTC 1


RESULT 414
ACD60052/c
ID   ACD60052 standard; RNA; 17 BP.
XX
AC   ACD60052;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HCV DNAzyme substrate sequence #1630.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
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PA   (MACE/) MACEJAK D.
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PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 263; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 4 A; 2 C; 8 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        886 TGCACTTACTTCTCAGC 902
              | ||| |||| ||||||
Db         17 TCCACGTACTCCTCAGC 1


RESULT 415
ACD55345/c
ID   ACD55345 standard; RNA; 17 BP.
XX
AC   ACD55345;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HBV amberzyme substrate sequence #3.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
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PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
```

PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Example 1; Page 202; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 604 ACAGAGTACTGACTCTG 620
|||| | |||||||||
Db 17 ACAGGGCCCTGACTCTG 1

RESULT 416
ACD63384
ID ACD63384 standard; RNA; 17 BP.
XX
AC ACD63384;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1023.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 293; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 740 CTTGGTAGGGTCCCAGG 756
|::||:| | : |||||
Db 1 CUUGGUAUGCUACCAGG 17

RESULT 417
ACD50352
ID ACD50352 standard; RNA; 17 BP.
XX
AC ACD50352;
XX
DT 23-SEP-2003 (first entry)
XX
DE HBV hammerhead ribozyme substrate sequence #17.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.

```
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 136; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        603 CACAGAGTACTGACTCT 619
              | |||| :||:| |:|:
Db          1 CUCAGAAUACUGUCUCU 17


RESULT 418
ACD62971
ID   ACD62971 standard; RNA; 17 BP.
XX
AC   ACD62971;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HCV minus strand DNAzyme substrate sequence #834.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
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PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 289; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 4 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 2.3e+02;
  Matches   11;  Conservative    3;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        787 CCTCTGGTGCCAAGAGC 803
```

```
              ||: :| :||||| |||
Db          1 CCUAUGCUGCCAACAGC 17
```

RESULT 419
ACD63400
ID ACD63400 standard; RNA; 17 BP.
XX
AC ACD63400;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1039.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 293; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 4 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

```
  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 2.3e+02;
  Matches   11;  Conservative    3;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        841 CTCTGAAGACAGCGTCC 857
              |: :||||||| | :||
Db          1 CUGUGAAGACACCCUCC 17
```

RESULT 420
ACC66568
ID ACC66568 standard; DNA; 17 BP.
XX
AC ACC66568;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour supression, SEQ ID 3815.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-333167/31.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 477; 738pp; French.
XX
CC The present invention relates to murine oligonucleotides (ACC62754-
CC ACC68806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

```
  Query Match              3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        756 GGTCCCTAGGCCTCCAC 772
              | ||| | |||||||||
Db          1 GATCCATGGGCCTCCAC 17
```

```
RESULT 421
ADA61967
ID   ADA61967 standard; DNA; 17 BP.
XX
AC   ADA61967;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human breast cancer 1, BRCA1, allele specific probe 5382insC-Normal.
XX
KW   ss; probe; human; chorionic gonadotropin; allele zygosity; polymorphism;
KW   breast cancer 1; BRCA1; single nucleotide polymorphism; SNP;
KW   parasitic disease; infectious disease; HIV; hepatitis; influenza;
KW   adenovirus; typhoid; antigen quantitation; probe.
XX
OS   Homo sapiens.
XX
PN   US2003054356-A1.
XX
PD   20-MAR-2003.
XX
PF   21-SEP-2001; 2001US-00956857.
XX
PR   21-SEP-2000; 2000US-0234430P.
XX
PA   (JACO/) JACOBSON J W.
PA   (BURR/) BURROUGHS J L.
PA   (OLIV/) OLIVER K G.
XX
PI   Jacobson JW,  Burroughs JL,  Oliver KG;
XX
DR   WPI; 2003-777159/73.
XX
PT   Detecting several reactive sites on an analyte useful for determining
PT   antigens in immunoassays, comprises reacting reactive sites with
PT   microspheres comprising reactants to form reactant-reactive site pairs
PT   that are detected.
XX
PS   Example 3; Page 14; 20pp; English.
XX
CC   The invention relates to a method of detecting several reactive sites on
CC   an analyte. The method is useful for detecting several reactive sites on
CC   an analyte such as a nucleic acid molecule. Optionally, the analyte is an
CC   antigen molecule, the reactive site is one or more epitopes on the
CC   antigen molecule, and the reactant is one or more fluorescently-labelled
CC   antibody respectively specific for one or more epitopes. The antigen
CC   molecule is a human chorionic gonadotropin (hCG) related molecule and the
CC   reactive site is a alpha-subunit or its variant, or a beta-subunit or its
CC   variant, and the reactant is a respective antibody. The method is useful
CC   for determining allele zygosity of nucleic acid molecules of a genetic
CC   locus having two alleles. The method is useful for determining
CC   polymorphism of nucleic acid molecules of a genetic locus having multiple
CC   alleles. The genetic locus is the human breast cancer 1 (BRCA1) gene. The
CC   method is useful for detecting several single nucleotide polymorphism
CC   (SNP)s in target nucleic acid molecules having two or more polymorphisms.
CC   The method is useful for determining parasitic and infectious diseases,
CC   human immunodeficiency virus (HIV), hepatitis, influenza, adenovirus, or
CC   typhoid. The method is useful for quantitating bacterial, mycoplasmal,
CC   fungal antigens and antibodies like Salmonella O antigens, or exotoxins.
CC   The present sequence represents the human breast cancer 1, BRCA1, allele
CC   specific probe 5382insC-Normal.
XX
SQ   Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        706 AGCGAGTCCCAGGAGAG 722
              || || |||||||| ||
Db          1 AGAGAATCCCAGGACAG 17
```

```
RESULT 422
ADB40353/c
ID   ADB40353 standard; DNA; 17 BP.
XX
AC   ADB40353;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #676.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 111; 771pp; French.
XX
CC   THe invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        612 CTGACTCTGCCTGGTTC 628
              ||  |||||||||| ||
Db         17 CTCTCTCTGCCTGGATC 1
```

```
RESULT 423
ADB42331
```

```
ID   ADB42331 standard; DNA; 17 BP.
XX
AC   ADB42331;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #2654.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 342; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        870 GAACACTTTCCTGAGAT 886
              || |||| ||||||| |
Db          1 GATCACTCTCCTGAGTT 17


RESULT 424
ADB42483/c
ID   ADB42483 standard; DNA; 17 BP.
XX
AC   ADB42483;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #2806.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 360; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 4 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        529 CCCAACATCCTCTGCTC 545
              |||||||||| || ||
Db         17 CCCAACATCCATTGATC 1


RESULT 425
ADB42715
ID   ADB42715 standard; DNA; 17 BP.
XX
AC   ADB42715;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
```

```
XX
DE   Tumour suppression/reversion associated nucleotide #3038.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 387; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 3 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        800 GAGCTCTCCTCCAACTC 816
              || ||  | |||||||||
Db          1 GATCTGTTCTCCAACTC 17


RESULT 426
ADB42752
ID   ADB42752 standard; DNA; 17 BP.
XX
AC   ADB42752;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #3075.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-441574/41.
XX
PT   New nucleic acid encoding human prostate membrane-specific antigen,
PT   useful e.g. for treatment of tumors and viral infection, also related
PT   polypeptide and antibodies.
XX
PS   Disclosure; Page 391; 771pp; French.
XX
CC   The invention relates to the isolation of 6327 nucleotide sequences,
CC   fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC   sequence having at least 80% identity, after optimal alignment, with the
CC   nucleotides, a sequence that hybridizes under stringent conditions with
CC   the nucleotides, or the complement, or corresponding RNA, of the
CC   nucleotides. The nucleotides are used as probes or primers for detecting,
CC   identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC   sense and antisense sequences, of nucleotides involved in tumour
CC   suppression or reversion, apoptosis and or viral resistance, to produce
CC   recombinant polypeptides, and to prepare transgenic animals, as
CC   experimental models. The nucleotides (also vectors containing them and
CC   cells containing the vectors), the encoded polypeptides and antibodies
CC   (Ab) against the polypeptide are useful for prevention and/or treatment
CC   of viral infections or diseases characterized by development of tumours
CC   or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC   Analysis of the expression of the nucleotides can be used for diagnosis
CC   and/or prognosis of these diseases. The nucleotides and polypeptides can
CC   also be used to screen for their specific interactive molecules,
CC   potentially useful for treating diseases associated with abnormal
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 6 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        638 GCTCCTAAGTCACAGAC 654
              | ||||||| || ||||
Db          1 GATCCTAAGCCAGAGAC 17


RESULT 427
ADC37896
ID   ADC37896 standard; DNA; 17 BP.
XX
AC   ADC37896;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:245.
XX
KW   human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;
KW   AMLP1a; ss.
XX
OS   Synthetic.
```

OS Homo sapiens.
XX
PN WO2003037931-A2.
XX
PD 08-MAY-2003.
XX
PF 01-NOV-2002; 2002WO-US035129.
XX
PR 01-NOV-2001; 2001US-0334773P.
XX
PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.
XX
PI Shannon M, Phan T;
XX
DR WPI; 2003-430501/40.
XX
PT New isolated nucleic acid molecule encoding a human angiomotin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLP1.
XX
PS Example 2; SEQ ID NO 245; 172pp; English.
XX
CC The present invention describes the human angiomotin-like protein 1
CC (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene
CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLP1. The present sequence represents a scanning
CC oligonucleotide for human AMLP1a, which is used in an example from the
CC present invention.
XX
SQ Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 776 TGAGGGCAGCCCCTCTG 792
||||||| || ||| |||
Db 1 TGAGGGGAGGCCCACTG 17

RESULT 428
ADC37895
ID ADC37895 standard; DNA; 17 BP.
XX
AC ADC37895;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:244.
XX
KW human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;
KW AMLP1a; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003037931-A2.
XX
PD 08-MAY-2003.
XX
PF 01-NOV-2002; 2002WO-US035129.
XX
PR 01-NOV-2001; 2001US-0334773P.
XX
PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.
XX
PI Shannon M, Phan T;
XX
DR WPI; 2003-430501/40.
XX
PT New isolated nucleic acid molecule encoding a human angiomotin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLP1.
XX
PS Example 2; SEQ ID NO 244; 172pp; English.
XX
CC The present invention describes the human angiomotin-like protein 1
CC (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene
CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or
CC preventing a disorder associated with decreased or increased expression
CC or activity of AMLP1. The present sequence represents a scanning
CC oligonucleotide for human AMLP1a, which is used in an example from the
CC present invention.
XX
SQ Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 775 CTGAGGGCAGCCCCTCT 791
||||||| || ||| ||
Db 1 CTGAGGGGAGGCCCACT 17

RESULT 429
ADB45590
ID ADB45590 standard; DNA; 17 BP.
XX
AC ADB45590;
XX
DT 18-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #5913.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 723; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and

CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 4 A; 2 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 586 GTTCTGTTTTTCTACAA 602
| ||||||||||| ||
Db 1 GATCTGTTTTTCTTAAA 17

RESULT 430
ADB45807
ID ADB45807 standard; DNA; 17 BP.
XX
AC ADB45807;
XX
DT 18-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #6130.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 748; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 4 A; 3 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 3.1%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 586 GTTCTGTTTTTCTACAA 602
| ||||||| |||| ||
Db 1 GATCTGTTTCTCTAGAA 17

RESULT 431
ADB45738
ID ADB45738 standard; DNA; 17 BP.
XX
AC ADB45738;
XX
DT 18-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #6061.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 740; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal

```
CC   expression of the nucleotides.
XX
SQ   Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        638 GCTCCTAAGTCACAGAC 654
              | ||||||| || ||||
Db          1 GATCCTAAGCCATAGAC 17


RESULT 432
ADD49164
ID   ADD49164 standard; DNA; 17 BP.
XX
AC   ADD49164;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human NOV protein-related reverse PCR primer Ag5978, SEQ ID 137.
XX
KW   Antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic;
KW   virucide; antibacterial; fungicide; protozoacide; nootropic;
KW   neuroprotective; antiparkinsonian; anticonvulsant; osteopathic;
KW   antiarthritic; antiinflammatory; dermatological; antiasthmatic;
KW   antilipemic; gene therapy; NOV protein; metabolic disorder; diabetes;
KW   obesity; viral infection; bacterial infection; fungal infection;
KW   helminthic infection; protozoal infection; anorexia; cancer;
KW   cardiovascular disease; hypertension; atherosclerosis;
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW   inflammatory skin disorder; asthma; dyslipidemia; PCR; primer; ss.
XX
OS   Unidentified.
XX
PN   WO2003060149-A2.
XX
PD   24-JUL-2003.
XX
PF   06-JAN-2003; 2003WO-US000252.
XX
PR   04-JAN-2002; 2002US-0345222P.
PR   14-JAN-2002; 2002US-0348693P.
PR   16-JAN-2002; 2002US-0349182P.
PR   17-JAN-2002; 2002US-0349733P.
PR   18-JAN-2002; 2002US-0350263P.
PR   24-JAN-2002; 2002US-0351977P.
PR   28-MAY-2002; 2002US-0383758P.
PR   05-JUN-2002; 2002US-0385969P.
PR   11-JUN-2002; 2002US-0387834P.
PR   17-JUL-2002; 2002US-0396407P.
PR   30-SEP-2002; 2002US-0415115P.
PR   03-JAN-2003; 2003US-00336603.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Grosse WM,  Alsobrook JP,  Anderson DW,  Burgess CE,  Edinger SR;
PI   Ellerman K,  Furtak K,  Gangolli EA,  Gerlach VL,  Gilbert JA;
PI   Gunther E,  Gorman L,  Guo X,  Ji W,  Li L,  Miller CE,  Padigaru M;
PI   Patturajan M,  Rastelli L,  Macdougall JR,  Mishra VS,  Smithson G;
PI   Spytek KA,  Stone DJ,  Shenoy SG,  Taupier RJ,  Vernet CAM,  Zhong M;
PI   Malyankar UM,  Millet I,  Kekuda R;
XX
DR   WPI; 2003-587288/55.
XX
PT   New isolated NOVX polypeptides and polynucleotides, useful for
PT   preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT   osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT   asthma, or infections.
XX
PS   Example C; Page 247; 311pp; English.
XX
CC   The present invention relates to novel NOV proteins and their coding
CC   sequences (ADD49028-ADD49131). The proteins and coding sequences are
CC   useful in the manufacture of a medicament for treating a syndrome
CC   associated with a human disease, preferably a NOV-associated disorder
CC   such as metabolic disorders, diabetes, obesity, infectious diseases
CC   (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer,
CC   cardiovascular diseases (hypertension, atherosclerosis),
CC   neurodegenerative disorders, Alzheimer's disease, Parkinson's disease,
CC   epilepsy, immune disorders (osteoarthritis), hematopoietic disorders,
CC   inflammatory skin disorders, asthma and various dyslipidemias. The coding
CC   sequences and proteins may also be used as targets for the identification
CC   of small molecules that modulate or inhibit e.g. neurogenesis, cell
CC   differentiation, cell proliferation, haematopoiesis, wound healing and
CC   angiogenesis, in gene therapy, in generation of antibodies that bind
CC   immunospecifically to NOV substances for use in therapeutic or diagnostic
CC   methods. The present sequence is a PCR primer which was used in an
CC   example from the invention.
XX
SQ   Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

  Query'Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        559 GCGAGCTCCTCCCAGAC 575
              | |  ||||||||||||
Db          1 GGGGACTCCTCCCAGAC 17


RESULT 433
ADE30977
ID   ADE30977 standard; DNA; 17 BP.
XX
AC   ADE30977;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Cholesterol homeostasis/adipogenesis related DNA seq id 364.
XX
KW   expression vector; anorectic; antiarteriosclerotic; cardiant;
KW   antidiabetic; elevated cholesterol; elevated lipid; adipogenesis;
KW   obesity; athersclerosis; diabetes mellitus;
KW   coronary artery heart disease; cholesterol homeostasis; ss;
KW   differntial expression.
XX
OS   Homo sapiens.
XX
PN   US2003180764-A1.
XX
PD   25-SEP-2003.
XX
PF   08-JAN-2003; 2003US-00339793.
XX
PR   09-JAN-2002; 2002US-0347286P.
XX
PA   (LYNX-) LYNX THERAPEUTICS INC.
XX
PI   Shang J,  Bowen B;
XX
DR   WPI; 2003-830986/77.
XX
PT   Polynucleotides differentially regulated in response to cholesterol and
PT   adipogenesis are useful to detect and treat associated conditions such as
PT   obesity, athersclerosis, diabetes mellitus and coronary artery heart
PT   disease.
XX
PS   Claim 8; SEQ ID NO 364; 59pp; English.
XX
CC   The invention describes a composition comprising at least one expression
CC   vector comprising a polynucleotide of the invention. The composition has
CC   anorectic, antiarteriosclerotic, cardiant and antidiabetic properties.
CC   The invention is used to detect and treat conditions associated with
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CC   elevated cholesterol and lipid or during adipogenesis, particularly
CC   obesity, atherscleros is, diabetes mellitus or coronary artery heart
CC   disease. This sequence represents a polynucleotide differentially
CC   expressed during cholesterol homeostasis and adipogenesis.
XX
SQ   Sequence 17 BP; 4 A; 2 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        586 GTTCTGTTTTTCTACAA 602
              | ||||||||||| ||
Db          1 GATCTGTTTTTCTTAAA 17


RESULT 434
AAQ20115
ID   AAQ20115 standard; DNA; 12 BP.
XX
AC   AAQ20115;
XX
DT   01-APR-1992  (first entry)
XX
DE   Cross-linking oligomer 112 for targetting Human hepatitis B virus.
XX
KW   deoxyribonucleic acid; major groove; ethanoamino group; HBV;
KW   aziridinylcytosine; cross-linking group; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "N4N4-ethanocytosine"
FT   modified_base   3
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  d
FT                   /mod_base= m5c
XX
PN   WO9118997-A.
XX
PD   12-DEC-1991.
XX
PF   25-MAY-1990;   90US-00529346.
XX
PR   25-MAY-1990;   90US-00529346.
PR   14-JAN-1991;   91US-00640654.
XX
PA   (GILE-) GILEAD SCIE INC.
XX
PI   Matteucci MD,  Krawczyk S;
XX
DR   WPI; 1992-007480/01.
XX
PT   New sequence-specific non-photo-activated crosslinking agents - bind to
PT   the major groove of duplex DNA and are esp. useful for treating latent
PT   infections e.g. HIV.
XX
PS   Example 4; Page 27; 42pp; English.
XX
CC   The oligomer is designed to target the Human hepatitis B virus beginning
CC   at nucleotide 2605 and to covalently cross-link to it. See also AAQ20110-
CC   Q20117
XX
SQ   Sequence 12 BP; 0 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCT 842
              ||||||||||||
Db          1 CTCTTTTCTTCT 12


RESULT 435
AAQ30265
ID   AAQ30265 standard; DNA; 12 BP.
XX
AC   AAQ30265;
XX
DT   25-MAR-2003  (revised)
DT   07-DEC-1992  (first entry)
XX
DE   Oligomer HBV112 for forming triplex with HBV target duplex.
XX
KW   Human hepatitis B virus; AIDS; modified; HIV; herpes; malignancy;
KW   inflammation; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N4 N4 ethanocytosine"
FT   modified_base   3
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  d
FT                   /mod_base= m5c
XX
PN   WO9209705-A1.
XX
PD   11-JUN-1992.
XX
PF   25-NOV-1991;   91WO-US008811.
XX
PR   23-NOV-1990;   90US-00617907.
PR   18-JAN-1991;   91US-00643382.
PR   08-APR-1991;   91US-00683420.
PR   17-APR-1991;   91US-00686544.
PR   17-APR-1991;   91US-00686546.
PR   17-APR-1991;   91US-00686547.
PR   27-SEP-1991;   91US-00766733.
XX
PA   (GILE-) GILEAD SCI INC.
XX
PI   Froehler B,  Krawczyk S,  Matteucci MD,  Milligan J;
XX
DR   WPI; 1992-217083/26.
XX
PT   New oligomers contg. modified bases - which form a triplex with G-C
PT   doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT   herpes malignancy and inflammation.
XX
PS   Claim 12; Page 66; 77pp; English.
XX
CC   The synthetic oligomer is capable of forming a triplex at physiological
CC   pH with a purine rich target sequence by coupling into the major groove
CC   of the duplex. The specific target sequence of this oligomer is an HBV
CC   target duplex beginning at nucleotide 2605 contg. a purine-rich region
CC   concentrated on one chain of the duplex. The oligomer, and others like it
CC   are useful in diagnosis and therapy of diseases characterised by specific
CC   DNA duplex targets, e.g. HIV, hepatitis, herpes, malignant tumours and
```

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CC   inflammation. The triple helices form under mild conditions thus assays
CC   may be carried out without subjecting the test specimen to harsh
CC   conditions. Additional modifications, such as altered internucleotide
CC   linkages may also be incorporated, rendering the oligomer e.g. stable to
CC   nuclease activity. The oligomer is able to inhibit gene expression, as
CC   verified by in vitro systems. See also AAQ25452-25501 and AAQ30226-448.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 12 BP; 0 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCT 842
              ||||||||||||
Db          1 CTCTTTTCTTCT 12


RESULT 436
AAT35028/c
ID   AAT35028 standard; DNA; 12 BP.
XX
AC   AAT35028;
XX
DT   18-FEB-1997  (first entry)
XX
DE   Triplex-forming oligonucleotide targetting HBV P-gene.
XX
KW   HBV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block;
KW   in vitro; DNA synthesis; DNA polymerase; Sequenase3; Taq; Vent; Pol I;
KW   accessory replication protein; SSB protein; sequence-specific;
KW   triplex-forming oligonucleotide; exon 3; inverted repeat; IR110;
KW   hepatitis B virus; P gene; ss.
XX
OS   Synthetic.
XX
PN   WO9618732-A2.
XX
PD   20-JUN-1996.
XX
PF   14-DEC-1995;   95WO-US016368.
XX
PR   15-DEC-1994;   94US-00358089.
XX
PA   (UNII ) UNIV ILLINOIS FOUND.
XX
PI   Mirkin SM,  Samadashwily GM;
XX
DR   WPI; 1996-300649/30.
XX
PT   Sequence specific inhibition of DNA synthesis - by triplex-forming
PT   oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment
PT   of e.g. HSV, Hepatitis C and Papillomavirus infection.
XX
PS   Claim 18; Page 57; 78pp; English.
XX
CC   Specifically designed oligodeoxyribonucleotides form triplexes in single-
CC   or double-strand DNA at homopurine-homopyrimidine targets. These
CC   triplexes block in vitro DNA synthesis by all DNA polymerases studied,
CC   including Sequenase3, Taq, Vent, and Pol I. A similar phenomenon occurs
CC   when DNA polymerases are supplemented with accessory replication
CC   proteins, including SSB protein. Replication blockage is highly sequence-
CC   specific and even one or two point substitutions within either the target
CC   sequence or the oligonucleotide abolish the effect. Sequence-specific
CC   blocking of DNA replication in vivo is facilitated by the methods and
CC   compositions of the present invention. The present sequence is a triplex-
CC   forming oligonucleotide which targets the P gene (position 2670-2681) of
CC   hepatitis B virus
XX
SQ   Sequence 12 BP; 8 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCT 842
              ||||||||||||
Db          1 CTCTTTTCTTCT 12


RESULT 437
AAX14761
ID   AAX14761 standard; DNA; 12 BP.
XX
AC   AAX14761;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Triple helix third strand of Hepatitis B virus nucleotides 561-572.
XX
KW   Triplex formation; DNA detection; triple helix; identification; bacteria;
KW   oncogene; virus; ss.
XX
OS   Synthetic.
OS   Hepatitis B virus.
XX
PN   US5861244-A.
XX
PD   19-JAN-1999.
XX
PF   22-DEC-1993;   93US-00173489.
XX
PR   29-OCT-1992;   92US-00968436.
XX
PA   (PROF-) PROFILE DIAGNOSTIC SCI INC.
XX
PI   Hepburn AG,  Wang C;
XX
DR   WPI; 1999-130384/11.
XX
PT   Assay of genetic sequences based on triplex formation from double
PT   stranded analyte - and hybrid of anchor and reporter sequences, with
PT   reporter released if triplex formation occurs, used e.g. to identify
PT   bacteria.
XX
PS   Disclosure; Col 19-20; 168pp; English.
XX
CC   The present sequence represents a polynucleotide that is able to form a
CC   triple helix with a double stranded sequence. Cytosine bases in the
CC   present can be replaced with 5-methylcytosine for increased triplex
CC   stability. The present sequence is used in the assay of the invention,
CC   where it can be part of the anchor DNA or reporter DNA sequence. The
CC   assay comprises adding a sample containing double-stranded DNA test
CC   sequences to an aqueous medium containing at least one complex of anchor
CC   DNA, attached to a solid support, and reporter DNA, where either a part
CC   of the anchor DNA or reporter DNA is designed to form a triple-strand
CC   structure with part of the test sequence. Triplex formation results in
CC   displacement of the reporter DNA which is detected as an indication of
CC   the presence of the DNA test sequence. The method is used to detect DNA
CC   sequences, particularly for identification of bacteria (by detecting
CC   genes for ribosomal RNA) in clinical samples, but also detection of
CC   oncogenes and Hepatitis B virus
XX
SQ   Sequence 12 BP; 0 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        831 CTCTTTTCTTCT 842
              ||||||||||||
Db          1 CTCTTTTCTTCT 12


RESULT 438
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ABI25638/c
ID   ABI25638 standard; DNA; 12 BP.
XX
AC   ABI25638;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 325611 for detecting SNP TSC0032626.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 325611; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 12 BP; 3 A; 0 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        530 CCAACATCCTCT 541
              ||||||||||||
Db         12 CCAACATCCTCT 1


RESULT 439
AAX14884/c
ID   AAX14884 standard; DNA; 13 BP.
XX
AC   AAX14884;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Triple helix forming nucleotides 444-456 of 23S rRNA gene.
XX
KW   Triple-helix forming region; Triplex formation; DNA detection;
KW   identification; bacteria; oncogene; virus; ds.
XX
OS   Alcaligenes faecalis.
XX
PN   US5861244-A.
XX
PD   19-JAN-1999.
XX
PF   22-DEC-1993;   93US-00173489.
XX
PR   29-OCT-1992;   92US-00968436.
XX
PA   (PROF-) PROFILE DIAGNOSTIC SCI INC.
XX
PI   Hepburn AG,  Wang C;
XX
DR   WPI; 1999-130384/11.
XX
PT   Assay of genetic sequences based on triplex formation from double
PT   stranded analyte - and hybrid of anchor and reporter sequences, with
PT   reporter released if triplex formation occurs, used e.g. to identify
PT   bacteria.
XX
PS   Disclosure; Col 23-24; 168pp; English.
XX
CC   The present sequence represents a potential triple-helix forming region.
CC   It can be used to demonstrate the assay of the invention. The assay
CC   comprises adding a sample containing double-stranded DNA test sequences,
CC   e.g. containing the present sequence, to an aqueous medium containing at
CC   least one complex of anchor DNA, attached to a solid support, and
CC   reporter DNA, where either a part of the anchor DNA or reporter DNA is
CC   designed to form a triple-strand structure with part of the test
CC   sequence. Triplex formation results in displacement of the reporter DNA
CC   which is detected as an indication of the presence of the DNA test
CC   sequence. The method is used to detect DNA sequences, particularly for
CC   identification of bacteria (by detecting genes for ribosomal RNA) in
CC   clinical samples, but also detection of oncogenes and Hepatitis B virus
XX
SQ   Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.8e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        833 CTTTTCTTCTCT 844
              ||||||||||||
Db         12 CTTTTCTTCTCT 1


RESULT 440
ABF19497
ID   ABF19497 standard; DNA; 13 BP.
XX
AC   ABF19497;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 119494 for detecting SNP TSC0029833.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
```

XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 119494; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 4 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 833 CTTTTCTTCTCT 844
||||||||||||
Db 1 CTTTTCTTCTCT 12

RESULT 441
ABF19496/c
ID ABF19496 standard; DNA; 13 BP.
XX
AC ABF19496;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 119493 for detecting SNP TSC0029833.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 119493; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 833 CTTTTCTTCTCT 844
||||||||||||
Db 13 CTTTTCTTCTCT 2

RESULT 442
AAX75731
ID AAX75731 standard; RNA; 15 BP.
XX
AC AAX75731;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt-1 and KDR hammerhead ribozyme target site #65.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
PS Example 9; Page 191; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 15 BP; 1 A; 6 C; 3 G; 0 T; 5 U; 0 Other;

```
  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   75.0%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        800 GAGCTCTCCTCC 811
              ||||:|:||:||
Db          1 GAGCUCUCCUCC 12


RESULT 443
AAZ64218
ID   AAZ64218 standard; RNA; 15 BP.
XX
AC   AAZ64218;
XX
DT   28-MAR-2000  (first entry)
XX
DE   Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 6326.
XX
KW   Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW   cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW   autoimmune disease; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO9955847-A2.
XX
PD   04-NOV-1999.
XX
PF   26-APR-1999;   99WO-US009027.
XX
PR   27-APR-1998;   98US-0083217P.
PR   18-SEP-1998;   98US-0100842P.
PR   25-FEB-1999;   99US-00257608.
PR   23-MAR-1999;   99US-00274553.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Mcswiggen JA,  Roberts E,  Pavco PA,  Macejak D;
XX
DR   WPI; 2000-062023/05.
XX
PT   Novel ribozymes for the treatment of diseases and conditions related to
PT   hepatitis C infection.
XX
PS   Claim 1; Page 85; 123pp; English.
XX
CC   The present sequence represents the preferred target sequence of an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the Hepatitis C virus (HCV) RNA sequence at the base position given in
CC   the descriptor line. The HCV sequence was screened for optimal ribozyme
CC   target sites using a computer folding algorithm and regions of the mRNA
CC   which did not form secondary folding structures and contained potential
CC   ribozyme cleavage sites were identified. Ribozymes were synthesised to
CC   target these sites and their activities optimised by either varying the
CC   length of the binding arms or by modification to prevent degradation by
CC   nucleases. The ribozymes of the invention inhibit gene expression and/or
CC   viral replication, and are used to treat diseases associated with
CC   Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
CC   hepatocellular carcinoma. The ribozymes may be used in combination with
CC   interferon to treat HCV infection, other infectious diseases, autoimmune
CC   diseases, and cancer
XX
SQ   Sequence 15 BP; 2 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   75.0%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        856 CCTGGCTCCAGT 867
              ||:|||:||||:
Db          1 CCUGGCUCCAGU 12


RESULT 444
ABS51918/c
ID   ABS51918 standard; DNA; 15 BP.
XX
AC   ABS51918;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Human FMO2 gene polymorphism detection ASO primer #39.
XX
KW   Human; flavin containing monooxygenase-2; FMO2; isogene; drugs targeting;
KW   drug toxicity; bone disorder; gene therapy; polymorphism; chromosome 1q;
KW   allele-specific oligonucleotide; ASO; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200253579-A2.
XX
PD   11-JUL-2002.
XX
PF   18-DEC-2001; 2001WO-US049059.
XX
PR   29-DEC-2000; 2000US-0259062P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bentivegna SC,  Duda A,  Kazemi A,  Lee HH,  Messer C,  Parks KE;
XX
DR   WPI; 2002-590627/63.
XX
PT   Novel genetic variants of Flavin Containing Monooxygenase 2 isogenes,
PT   useful for improving efficiency and reliability in drug development for
PT   treating developmental bone disorders.
XX
PS   Claim 15; Page 16; 140pp; English.
XX
CC   The present invention relates to a new polynucleotide which comprises
CC   flavin containing monooxygenase-2 (FMO2) isogenes. The invention is
CC   useful in screening for drugs that are useful for treating drug toxicity.
CC   The methods of the invention are useful for improving the efficiency and
CC   reliability of several steps in the discovery and development of drugs
CC   for treating diseases associated with FMO2 activity. The methods are also
CC   used by the pharmaceutical research scientist to validate FMO2 as a
CC   candidate target for treating a specific condition or disease predicted
CC   to be associated with FMO2 activity, e.g. drug toxicity, and in the
CC   design of clinical trials for treating a specific condition of disease
CC   associated with FMO2 activity. The methods are also useful for screening
CC   compounds targeting FMO2. The nucleic acid of the invention is useful in
CC   studying the expression and function of FMO2, and in expressing FMO2
CC   protein for use in screening for candidate drugs to treat diseases
CC   related to FMO2 activity. It is also useful in studying the effect of the
CC   variation on the biological activity of FMO2 as well as on the binding
CC   affinity of candidate drugs targeting FMO2 for the treatment of drug
CC   toxicity. The invention is useful for studying the expression of FMO2
CC   isogenes in vivo, for in vivo screening and testing of drugs targeted
CC   against FMO2 protein, and for testing the efficacy of therapeutic agents
CC   and compounds for treating drug toxicity in a biological system. The
CC   present nucleic acid sequence represents an allele-specific
CC   oligonucleotide (ASO) primer that was used in the methods of the
CC   invention to detect polymorphisms in the human FMO2 gene located on
CC   chromosome 1q
XX
SQ   Sequence 15 BP; 3 A; 6 C; 3 G; 2 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        773 TTCTGAGGGCAGCC 786
              :|||||||||| |
Db         14 YTCTGAGGGCAGGC 1
```

```
RESULT 445
ABK36997
ID   ABK36997 standard; DNA; 15 BP.
XX
AC   ABK36997;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Human ALAS2 gene allele-specific oligonucleotide sequencing primer #22.
XX
KW   Human; aminolevulinate delta synthase 2; ALAS2; haplotyping; primer; ss;
KW   haplotype pair; single nucleotide polymorphism; genotyping; antianaemic;
KW   gene therapy; drug screening; X-linked sideroblastic anaemia; sequencing;
KW   hypochromic anaemia; probe; PCR.
XX
OS   Homo sapiens.
XX
PN   WO200210454-A2.
XX
PD   07-FEB-2002.
XX
PF   30-JUL-2001; 2001WO-US023914.
XX
PR   28-JUL-2000; 2000US-0221827P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Choi JY,  Koshy B,  Kliem S,  Stephens JC;
XX
DR   WPI; 2002-188755/24.
XX
PT   New isolated human aminolevulinate delta synthase 2 polynucleotide,
PT   useful for therapeutic purposes, for studying the expression and function
PT   of the polynucleotide, and for expressing the aminolevulinate protein.
XX
PS   Claim 16; Page 13; 90pp; English.
XX
CC   The invention relates to single nucleotide polymorphisms in the gene
CC   encoding human aminolevulinate delta synthase 2 (ALAS2). A method for
CC   haplotyping the ALAS2 gene in an individual comprises identifying the
CC   nucleotide at one or more polymorphic sites and determining whether one
CC   of the copies of the gene is defined by one of the ALAS2 haplotypes given
CC   in the specification or whether both copies are defined by a haplotype
CC   pair. This method is useful in genotyping, whereby all possible haplotype
CC   pairs can be assigned to specific genotypes. An association between a
CC   trait and a haplotype or haplotype pair of the ALAS2 gene can be
CC   identified by comparing the frequency of the haplotype or haplotype pair
CC   in a population exhibiting the trait with the frequency of the haplotype
CC   or haplotype pair in a reference population, where a higher haplotype
CC   frequency in the trait population indicates the trait is associated with
CC   the haplotype or haplotype pair. ALAS2 and its corresponding DNA are used
CC   for studying the expression and function of ALAS2, for use in screening
CC   for candidate drugs to treat diseases related to ALAS2 activity, such as
CC   X-linked sideroblastic anaemia and hypochromic anaemia. The sequences are
CC   also useful for studying the effect of variation on the biological
CC   activity of ALAS2 as well as on the binding affinity of candidate drugs
CC   targeting ALAS2. Sequences ABK36963-ABK37027 represent allele-specific
CC   oligonucleotide probes, sequencing primers and PCR primers used to detect
CC   ALAS2 gene polymorphisms
XX
SQ   Sequence 15 BP; 2 A; 6 C; 6 G; 0 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        779 GGGCAGCCCCTCTG 792
              |||||||||| |:|
Db          2 GGGCAGCCCCACYG 15


RESULT 446
ABK68725/c
ID   ABK68725 standard; DNA; 15 BP.
XX
AC   ABK68725;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human OR11A1 gene polymorphism detection ASO primer #13.
XX
KW   Human; olfactory receptor, family 11, subfamily A, member 1; OR11A1;
KW   isogene; haplotyping; genotyping; olfactory disorder; SNP; primer; ss;
KW   single nucleotide polymorphism; allele-specific oligonucleotide; ASO.
XX
OS   Homo sapiens.
XX
PN   WO200218657-A1.
XX
PD   07-MAR-2002.
XX
PF   31-AUG-2001; 2001WO-US027265.
XX
PR   31-AUG-2000; 2000US-0229226P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kliem SE,  Koshy B;
XX
DR   WPI; 2002-351713/38.
XX
PT   Novel genetic variants of Olfactory receptor, family 11, subfamily A,
PT   member 1 gene useful in studying expression and function of the protein,
PT   and for screening drugs to treat diseases e.g. olfactory disorders.
XX
PS   Claim 16; Page 13; 81pp; English.
XX
CC   The present invention relates to a new polynucleotide with a sequence
CC   comprising an olfactory receptor, family 11, subfamily A, member 1
CC   (OR11A1) isogene selected from 9 isogenes, with regions of a fully
CC   defined 8980 base pair sequence given in the specification. The
CC   polynucleotide is also defined by a corresponding set of polymorphisms
CC   whose locations are given in the specification. The invention is useful
CC   for haplotyping and genotyping the OR11A1 gene in an individual. Other
CC   uses include predicting a haplotype pair for OR11A1 gene of an
CC   individual, and for identifying an association between a trait and at
CC   least one haplotype pairs or haplotypes of OR11A1 gene. The polypeptide
CC   is also useful in studying the expression and function of OR11A1, and in
CC   expressing OR11A1 protein for use in screening for candidate drugs to
CC   treat diseases related to OR11A1 activity and in studying the effect of
CC   the variation on the biological activity of OR11A1 as well as on the
CC   binding affinity of candidate drugs targeting OR11A1 for the treatment of
CC   olfactory disorders. Without requiring any a prior knowledge of the
CC   phenotypic effect of any particular OR11A1 haplotype pair of haplotypes,
CC   the method of the invention provides the scientist with a tool to
CC   identify lead compounds that are more likely to show efficacy in clinical
CC   trials. The present nucleic acid sequence represents one of a collection
CC   of allele-specific oligonucleotide (ASO) primers (ABK68713- ABK68728)
CC   that were used in the invention to detect polymorphisms in the human
CC   OR11A1 gene
XX
SQ   Sequence 15 BP; 0 A; 4 C; 6 G; 4 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        681 CCCCCAGGGCCACA 694
              :| ||||||||||
Db         14 YCACCAGGGCCACA 1


RESULT 447
ABK16655/c
ID   ABK16655 standard; DNA; 15 BP.
```

```
XX
AC   ABK16655;
XX
DT   14-MAR-2002  (first entry)
XX
DE   Human AGTRL1 gene allele-specific oligonucleotide sequencing primer #9.
XX
KW   Human; angiotensin receptor-like 1; AGTRL1; haplotyping; haplotype pair;
KW   single nucleotide polymorphism; genotyping; gene therapy; drug screening;
KW   hypertension; ss; probe; sequencing primer; PCR primer.
XX
OS   Homo sapiens.
XX
PN   WO200190123-A2.
XX
PD   29-NOV-2001.
XX
PF   23-MAY-2001; 2001WO-US016906.
XX
PR   23-MAY-2000; 2000US-0206264P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kliem SE,  Messer C,  Tanguay DA;
XX
DR   WPI; 2002-097637/13.
XX
PT   New isolated polymorphic variant of human angiotensin receptor-like 1
PT   (AGTRL1) gene useful for expressing AGTRL1 protein isoform to screen
PT   drugs to treat AGTRL1 activity-related disease.
XX
PS   Claim 16; Page 13; 71pp; English.
XX
CC   The invention relates to single nucleotide polymorphisms in the gene
CC   encoding the human angiotensin receptor-like 1 (AGTRL1) polypeptide. A
CC   method for haplotyping the AGTRL1 gene in an individual comprises
CC   identifying the nucleotide at one or more polymorphic sites and
CC   determining whether one of the copies of the gene is defined by one of
CC   the AGTRL1 haplotypes given in the specification or whether both copies
CC   are defined by a haplotype pair. This method is useful in genotyping,
CC   whereby all possible haplotype pairs can be assigned to specific
CC   genotypes. An association between a trait and a haplotype or haplotype
CC   pair of the AGTRL1 gene can be identified by comparing the frequency of
CC   the haplotype or haplotype pair in a population exhibiting the trait with
CC   the frequency of the haplotype or haplotype pair in a reference
CC   population, where a higher haplotype frequency in the trait population
CC   indicates the trait is associated with the haplotype or haplotype pair.
CC   AGTRL1 and its corresponding DNA are used for studying the expression and
CC   function of AGTRL1, for use in screening for candidate drugs to treat
CC   diseases related to AGTRL1 activity, such as hypertension. The sequences
CC   are also useful for studying the effect of variation on the biological
CC   activity of AGTRL1 as well as on the binding affinity of candidate drugs
CC   targeting AGTRL1. Sequences ABK16638-ABK16682 represent allele-specific
CC   oligonucleotide probes, sequencing primers and PCR primers used to detect
CC   AGTRL1 gene polymorphisms
XX
SQ   Sequence 15 BP; 1 A; 7 C; 4 G; 2 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        746 AGGGTCCCAGGGTC 759
              :||||||||||| |
Db         14 RGGGTCCCAGGGAC 1


RESULT 448
ABK96512/c
ID   ABK96512 standard; DNA; 15 BP.
XX
AC   ABK96512;
XX
DT   24-SEP-2002  (first entry)
XX
DE   Human PLAU gene, allele specific primer #21.
XX
KW   Human; ss; primer; Plasminogen activator; urokinase; PLAU; cancer;
KW   cytostatic; serine protease; thrombolytic disorder; isogene; PCR;
KW   pulmonary embolism; chromosome 10q24-qter; haplotype; genotype; SNP;
KW   single nucleotide polymorphism; thrombolytic; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO200240503-A2.
XX
PD   23-MAY-2002.
XX
PF   14-NOV-2001; 2001WO-US044001.
XX
PR   17-NOV-2000; 2000US-0249703P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Bentivegna SC,  Koshy B;
XX
DR   WPI; 2002-519370/55.
XX
PT   Genetic variants of Plasminogen activator, Urokinase (PLAU) isogenes,
PT   useful for improving efficiency and reliability in drug development for
PT   treating thrombolytic disorders and cancer.
XX
PS   Claim 14; Page 14; 92pp; English.
XX
CC   The invention relates to a polynucleotide comprising a first nucleotide
CC   sequence (NS1) comprising a PLAU (plasminogen activator, urokinase, a
CC   serine protease) isogene selected from isogenes 1-9 and 11-20 given in
CC   the specification, where each isogene comprises the regions of the PLAU
CC   gene or cDNA and is further defined by the corresponding sequence of
CC   polymorphisms (defining single nucleotide polymorphisms, SNP). Also
CC   included are methods of haplotyping/genotyping (and predicting the
CC   haplotype/genotype of the PLAU gene of an individual, identifying an
CC   association between a trait and at least one haplotype or haplotype pair
CC   of the PLAU gene, an isolated oligonucleotide for detecting a
CC   polymorphism in the PLAU gene, a recombinant non-human organism
CC   transformed or transfected with the gene or cDNA, fragments of the
CC   polynucleotides of at least 10 base pairs encompassing a polymorphic
CC   site, an isolated polymorphic variant PLAU protein or fragment, an
CC   isolated monoclonal antibody specific for PLAU, a computer system for
CC   storing and analysing polymorphism data for the PLAU gene and a genome
CC   anthology for the PLAU gene. PLAU is useful in screening for drugs
CC   targeting PLAU that are useful for treating thrombolytic disorders and
CC   cancers. The methods are useful for improving the efficiency and
CC   reliability of the discovery and development of drugs for treating
CC   diseases associated with PLAU activity, in validating PLAU as a drug
CC   target and in the design of clinical trials for treating a specific
CC   condition of disease associated with PLAU activity. The antibody is
CC   useful in diagnostic, prognostic and therapeutic methods. PLAU
CC   polynucleotides are useful in studying the expression and function of
CC   PLAU, and in expressing PLAU protein for use in screening for candidate
CC   drugs to treat diseases related to PLAU activity. The gene for PLAU is
CC   located on chromosome 10q24-qter. The present sequence is an allele
CC   specific primer used to amplify PLAU polynucleotides with a specific
CC   polymorphism
XX
SQ   Sequence 15 BP; 4 A; 3 C; 4 G; 3 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        869 GGAACACTTTCCTG 882
              :||||||||| |||
Db         14 RGAACACTTTGCTG 1
```

```
RESULT 449
AAD25004/c
ID   AAD25004 standard; DNA; 15 BP.
XX
AC   AAD25004;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human AANAT gene polymorphism detecting ASO primer #18.
XX
KW   Human; genetic variant; arylalkylamine N-acetyltransferase; AANAT gene;
KW   haplotyping; genotyping; pineal gland disorder; melatonin synthesis;
KW   gene therapy; antisense therapy; allele specific oligonucleotide;
KW   ASO primer; polymorphism; ss.
XX
OS   Homo sapiens.
XX
PN   WO200187909-A2.
XX
PD   22-NOV-2001.
XX
PF   18-MAY-2001; 2001WO-US016279.
XX
PR   18-MAY-2000; 2000US-0205068P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Choi JY,  Kazemi A,  Nandabalan K;
XX
DR   WPI; 2002-055682/07.
XX
PT   New genetic variants of human arylalkylamine N-acetyltransferase (AANAT)
PT   gene for studying expression, function of the gene and expressing AANAT
PT   protein for use in screening for drugs to treat disorders of pineal
PT   gland.
XX
PS   Claim 16; Page 13; 67pp; English.
XX
CC   The patent discloses novel genetic variants of the arylalkylamine N-
CC   acetyltransferase (AANAT) gene. The invention also relates to
CC   compositions and methods for haplotyping and/or genotyping the AANAT
CC   gene. Polymorphic variants of AANAT protein are useful for screening for
CC   drugs targeting the polypeptide. AANAT polynucleotides are useful for
CC   studying the expression and function of AANAT and for expressing AANAT
CC   protein for use in screening for candidate drugs to treat diseases
CC   related to AANAT activity. The methods are used to develop diagnostic
CC   tests and therapeutic treatment for disorders of pineal gland that derive
CC   from defects in melatonin synthesis. It is useful for determining whether
CC   an individual has one of the haplotypes 1-4 or the haplotype pairs. The
CC   haplotyping method is useful to validate AANAT as a candidate target for
CC   treating a specific condition or disease predicted to be associated with
CC   AANAT activity. AANAT sequences of the invention are also used in gene
CC   therapy and antisense therapy. The present DNA sequence is an allele
CC   specific oligonucleotide (ASO) primer which is used for detecting human
CC   AANAT gene polymorphisms
XX
SQ   Sequence 15 BP; 1 A; 5 C; 3 G; 5 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        841 CTCTGAAGACAGCG 854
              |:||||||||| |
Db         15 CWCTGAAGACAGAG 2


RESULT 450
ABX01271
ID   ABX01271 standard; RNA; 15 BP.
XX
AC   ABX01271;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Hepatitis C virus substrate #1053 for HCV hammerhead ribozyme #1053.
XX
KW   Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW   HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW   liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW   type I interferon; interferon alpha; interferon beta; cytostatic;
KW   interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW   substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
OS   Hepatitis C virus.
XX
PN   US2002082225-A1.
XX
PD   27-JUN-2002.
XX
PF   23-MAR-1999;   99US-00274553.
XX
PR   23-MAR-1999;   99US-00274553.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
PA   (ROBE/) ROBERTS B.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  Mcswiggen JA,  Roberts B,  Pavco PA,  Macejack D;
XX
DR   WPI; 2002-617759/66.
XX
PT   New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
PT   replication and are useful to treat hepatitis C virus infections and
PT   cirrhosis, liver failure or hepatocellular carcinoma.
XX
PS   Claim 1; Page 51; 80pp; English.
XX
CC   The present invention relates to enzymatic nucleic acids which
CC   specifically cleave RNA derived from Hepatitis C virus (HCV). The
CC   enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
CC   (HP) motif where the binding arms comprise sequences complementary to one
CC   of the substrate sequences defined in the specification. The HCV
CC   ribozymes are useful for modulating the expression and/or replication of
CC   HCV. They can be used to treat cirrhosis, liver failure and/or
CC   hepatocellular carcinoma. The HCV ribozymes are also useful for treating
CC   a condition associated with HCV infection in conjunction with one or more
CC   other drug therapies, particularly type I interferon, especially
CC   interferon alpha, beta or gamma or consensus interferon. The present
CC   sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
CC   Some of the sequence data for this patent did not form part of the
CC   printed specification. The complete sequence data for this patent was
CC   obtained in electronic format directly from the USPTO web site at
CC   seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ   Sequence 15 BP; 2 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   75.0%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        856 CCTGGCTCCAGT 867
              ||:|||:||||:
Db          1 CCUGGCUCCAGU 12


RESULT 451
ADC98469/c
ID   ADC98469 standard; DNA; 16 BP.
XX
AC   ADC98469;
XX
DT   01-JAN-2004  (first entry)
XX
```

DE NOT304 polymorphism marker PCR primer B primer seq.
XX
KW low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
KW single nucleotide polymorphism; SNP; PCR primer; ss; human.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003054218-A2.
XX
PD 03-JUL-2003.
XX
PF 19-DEC-2002; 2002WO-US040948.
XX
PR 20-DEC-2001; 2001US-0342711P.
PR 04-NOV-2002; 2002US-0423559P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
PI Mckay I, Schafer A;
XX
DR WPI; 2003-559156/52.
XX
PT Determining whether an individual is predisposed to susceptibility to low
PT bone mineral density (BMD) and/or bone damage, involves identifying
PT polymorphisms in associated genes.
XX
PS Example 8; Page 238; 246pp; English.
XX
CC The present invention describes a method of determining whether an
CC individual is predisposed to susceptibility to low bone mineral density
CC (BMD) and/or bone damage comprising identifying whether the individual
CC has at least one polymorphism in a polynucleotide encoding a protein,
CC where the polynucleotide is one of 81 200-500 nucleotide sequences (S1,
CC see ADC98235 to ADC98315). An agent identified in an method from the
CC present invention which can be used for the prevention or treatment of a
CC disease resulting in susceptibility to low BMD and/or bone damage is
CC useful in the manufacture of a medicament for use in modulating the
CC susceptibility to low BMD and/or bone damage. The disease associated with
CC low BMD and/or bone damage is osteoporosis. The present PCR primer
CC sequence is used in the exemplification of the present invention.
XX
SQ Sequence 16 BP; 2 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 703 TCCAGCGAGTCC 714
||||||||||||
Db 13 TCCAGCGAGTCC 2

RESULT 452
AAX63823/c
ID AAX63823 standard; RNA; 17 BP.
XX
AC AAX63823;
XX
DT 20-JUL-1999 (first entry)
XX
DE Rabbit stromelysin hammerhead target SEQ ID NO:455.
XX
KW Arthritic condition; graft tolerance; immune response; target; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW diagnosis; ss.
XX
OS Oryctolagus cuniculus.
XX
PN WO9618736-A2.
XX
PD 20-JUN-1996.
XX
PF 22-NOV-1995; 95WO-US015516.
XX
PR 13-DEC-1994; 94US-00354920.
PR 23-DEC-1994; 94US-00363253.
PR 23-DEC-1994; 94US-00363254.
PR 17-FEB-1995; 95US-00390850.
PR 20-APR-1995; 95US-00426124.
PR 02-MAY-1995; 95US-00432874.
PR 04-MAY-1995; 95US-00434509.
PR 07-JUL-1995; 95US-0000951P.
PR 07-JUL-1995; 95US-0000974P.
PR 07-AUG-1995; 95US-00512861.
PR 05-OCT-1995; 95US-00541365.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
PI Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
DR WPI; 1996-300653/30.
XX
PT Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of
PT auto-immune diseases.
XX
PS Example 1; Page 153; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention
XX
SQ Sequence 17 BP; 4 A; 2 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 565 TCCTCCCAGACC 576
||||||||||||
Db 17 TCCTCCCAGACC 6

RESULT 453
AAX71614
ID AAX71614 standard; RNA; 17 BP.
XX
AC AAX71614;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human KDR VEGF receptor hammerhead ribozyme substrate #626.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;

```
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 116; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match              3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   75.0%;  Pred. No. 2.5e+02;
  Matches    9;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        800 GAGCTCTCCTCC 811
              ||||:|:||:||
Db          4 GAGCUCUCCUCC 15


RESULT 454
AAX71615
ID   AAX71615 standard; RNA; 17 BP.
XX
AC   AAX71615;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #627.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 116; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 1 A; 6 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match              3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   75.0%;  Pred. No. 2.5e+02;
  Matches    9;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        800 GAGCTCTCCTCC 811
              ||||:|:||:||
Db          2 GAGCUCUCCUCC 13


RESULT 455
AAH95806/c
ID   AAH95806 standard; RNA; 17 BP.
XX
AC   AAH95806;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human Chk1 ribozyme substrate SEQ ID NO: 1231.
XX
KW   Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
KW   RNA cleavage; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157206-A2.
XX
PD   09-AUG-2001.
XX
PF   02-FEB-2001; 2001WO-US003504.
XX
PR   03-FEB-2000; 2000US-0179983P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (FATT/) FATTAEY A R.
XX
PI   Fattaey AR,  Jarvis T,  Mcswiggen J,  Booher RN,  Holman PS;
XX
DR   WPI; 2001-496922/54.
XX
PT   Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
PT   molecules, which downregulates expression of a checkpoint kinase-1 gene,
PT   useful for treating colorectal, lung, breast or prostate cancers.
XX
```

PS Claim 4; Page 89; 115pp; English.
XX
CC The present invention provides nucleic acid molecules capable of
CC downregulating the expression of the human checkpoint kinase-1 (Chk1)
CC gene. These may be antisense or ribozyme sequences, and are useful in the
CC treatment of diseases associated with conditions affected by Chk1 levels,
CC including cancer. The present sequence is an oligonucleotide described in
CC the exemplification of the invention
XX
SQ Sequence 17 BP; 4 A; 1 C; 8 G; 0 T; 4 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 801 AGCTCTCCTCCA 812
||||||||||||
Db 16 AGCTCTCCTCCA 5

RESULT 456
ABA78038
ID ABA78038 standard; DNA; 17 BP.
XX
AC ABA78038;
XX
DT 24-JAN-2002 (first entry)
XX
DE BRCA1 mutation correcting oligonucleotide SEQ ID NO: 884.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 98; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 877 TTCCTGAGATGC 888
||||||||||||
Db 4 TTCCTGAGATGC 15

RESULT 457
ABA78037/c
ID ABA78037 standard; DNA; 17 BP.
XX
AC ABA78037;
XX
DT 24-JAN-2002 (first entry)
XX
DE BRCA1 mutation correcting oligonucleotide SEQ ID NO: 883.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 98; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A

```
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 6 A; 4 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        877 TTCCTGAGATGC 888
              ||||||||||||
Db         14 TTCCTGAGATGC 3


RESULT 458
AAF56550/c
ID   AAF56550 standard; DNA; 17 BP.
XX
AC   AAF56550;
XX
DT   11-SEP-2003  (revised)
DT   18-APR-2001  (first entry)
XX
DE   HIV-1 detection probe SEQ ID NO: 18.
XX
KW   HIV-1 detection; diagnosis; blood screening; PCR primer; probe; ss.
XX
OS   Human immunodeficiency virus 1.
XX
PN   WO200104361-A2.
XX
PD   18-JAN-2001.
XX
PF   07-JUL-2000; 2000WO-US018685.
XX
PR   09-JUL-1999;   99US-0143072P.
XX
PA   (GENP-) GEN-PROBE INC.
PA   (BEEG/) BEE G G.
PA   (YANG/) YANG Y Y.
PA   (KOLK/) KOLK D P.
PA   (GIAC/) GIACHETTI C.
PA   (MCDO/) MCDONOUGH S H.
XX
PI   Bee GG,  Yang YY,  Kolk DP,  Giachetti C,  Mcdonough SH;
XX
DR   WPI; 2001-147200/15.
XX
PT   Detecting HIV-1 nucleic acids in biological samples useful for diagnosing
PT   HIV-1 infection involves using nucleic acid capture oligomers,
PT   amplification oligomers and probe oligomers.
XX
PS   Claim 1; Page 52; 60pp; English.
XX
CC   The present invention provides probes and PCR primers for use in the
CC   detection of HIV-1. These are shown in AAF56533-AAF56589. They can be
CC   used to diagnose HIV infection and to ensure that blood and blood
CC   products do not contain the virus, thus enabling the prevention of HIV
CC   infection during blood transfusions. (Updated on 11-SEP-2003 to
CC   standardise OS field)
XX
SQ   Sequence 17 BP; 3 A; 1 C; 8 G; 4 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   92.3%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        694 ACTGTACCCTCCA 706
              |||||||||  |||
Db         17 ACTGTACCCNCCA 5


RESULT 459
ABN02149/c
ID   ABN02149 standard; DNA; 17 BP.
XX
AC   ABN02149;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2141.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 2141; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
```

```
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 0 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        683 CCCAGGGCCACA 694
              ||||||||||||
Db         13 CCCAGGGCCACA 2


RESULT 460
ABN02150/c
ID   ABN02150 standard; DNA; 17 BP.
XX
AC   ABN02150;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2142.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 2142; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        683 CCCAGGGCCACA 694
              ||||||||||||
Db         12 CCCAGGGCCACA 1


RESULT 461
ABT35050
ID   ABT35050 standard; DNA; 17 BP.
XX
AC   ABT35050;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 687.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 114; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
```

```
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        868 TGGAACACTTTC 879
              ||||||||||||
Db          5 TGGAACACTTTC 16


RESULT 462
ABT34660
ID   ABT34660 standard; DNA; 17 BP.
XX
AC   ABT34660;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 297.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 68; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 2 A; 5 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        830 TCTCTTTTCTTC 841
              ||||||||||||
Db          3 TCTCTTTTCTTC 14


RESULT 463
ABT37809
ID   ABT37809 standard; DNA; 17 BP.
XX
AC   ABT37809;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 3446.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 436; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
```

CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 868 TGGAACACTTTC 879
||||||||||||
Db 5 TGGAACACTTTC 16

RESULT 464
ACA06712/c
ID ACA06712 standard; RNA; 17 BP.
XX
AC ACA06712;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #531.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 35; 72pp; English.

XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 864 CAGTTGGAACAC 875
||||||||||||
Db 14 CAGTTGGAACAC 3

RESULT 465
ACA06713/c
ID ACA06713 standard; RNA; 17 BP.
XX
AC ACA06713;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #532.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.

XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 35; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 864 CAGTTGGAACAC 875
||||||||||||
Db 13 CAGTTGGAACAC 2

RESULT 466
ABZ64774
ID ABZ64774 standard; RNA; 17 BP.
XX
AC ABZ64774;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human HER2 DNAzyme substrate #231.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 4; Page 137; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 8 A; 7 C; 1 G; 0 T; 1 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 597 CTACAACACAGA 608
|:||||||||||
Db 4 CUACAACACAGA 15

RESULT 467
ABZ64775
ID ABZ64775 standard; RNA; 17 BP.
XX
AC ABZ64775;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human HER2 DNAzyme substrate #232.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 4; Page 137; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 7 A; 7 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 597 CTACAACACAGA 608
|:||||||||||
Db 2 CUACAACACAGA 13

RESULT 468
ACD59279
ID ACD59279 standard; RNA; 17 BP.
XX
AC ACD59279;
XX
DT 24-SEP-2003 (first entry)
XX
DE HCV DNAzyme substrate sequence #1249.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 256; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 568 TCCCAGACCAAG 579
:||||||||||
Db 3 UCCCAGACCAAG 14

RESULT 469
ACD63390/c
ID ACD63390 standard; RNA; 17 BP.
XX
AC ACD63390;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1029.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX

PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 293; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 568 TCCCAGACCAAG 579
||||||||||||
Db 16 TCCCAGACCAAG 5

RESULT 470
ACC66522
ID ACC66522 standard; DNA; 17 BP.
XX
AC ACC66522;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour supression, SEQ ID 3769.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-333167/31.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 471; 738pp; French.
XX
CC The present invention relates to murine oligonucleotides (ACC62754-
CC ACC68806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 3.0%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 581 CTTTTGTTCTGT 592
||||||||||||
Db 6 CTTTTGTTCTGT 17

RESULT 471
ACC68611
ID ACC68611 standard; DNA; 17 BP.
XX
AC ACC68611;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour supression, SEQ ID 5858.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-333167/31.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 715; 738pp; French.

```
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        622 CTGGTTCCTGAG 633
              ||||||||||||
Db          4 CTGGTTCCTGAG 15


RESULT 472
ACC49069/c
ID   ACC49069 standard; DNA; 17 BP.
XX
AC   ACC49069;
XX
DT   17-JUN-2003  (first entry)
XX
DE   Human NOV2 CG140765-01 gene reverse PCR primer SEQ ID NO:32.
XX
KW   Human; NOVX; antidiabetic; anorectic; cardiant; hypotensive; virucide;
KW   antiarteriosclerotic; antibacterial; fungicide; protozoacide; nootropic;
KW   neuroprotective; antiparkinsonian; anticonvulsant; antiinflammatory;
KW   osteopathic; antiarthritic; dermatological; antiasthmatic; antilipaemic;
KW   vulnerary; antiangiogenic; anabolic; gene therapy; metabolic disorder;
KW   diabetes; obesity; infectious disease; anorexia; cancer; hypertension;
KW   cardiovascular disease; atherosclerosis; neurodegenerative disorder;
KW   Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder;
KW   osteoarthritis; haematopoietic disorder; inflammatory skin disorder;
KW   asthma; dyslipidaemia; neurogenesis; cell differentiation; wound healing;
KW   cell proliferation; haematopoiesis; angiogenesis; PCR primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO2003022998-A2.
XX
PD   20-MAR-2003.
XX
PF   09-SEP-2002; 2002WO-US028498.
XX
PR   07-SEP-2001; 2001US-0318120P.
PR   19-SEP-2001; 2001US-0323519P.
PR   16-MAY-2002; 2002US-0381035P.
PR   06-SEP-2002; 2002US-00236104.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Alsobrook JP,  Burgess CE,  Edinger SR,  Gerlach VL,  Lepley DM;
PI   Patturajan M,  Pena CEA,  Rieger DK,  Shimkets RA,  Spytek KA;
PI   Taupier RJ,  Zhong M;
XX
DR   WPI; 2003-354532/33.
XX
PT   New isolated NOVX polypeptide, useful for preventing, diagnosing or
PT   treating NOVX-associated disorders, e.g. osteoarthritis, obesity,
PT   atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
XX
PS   Example C; Page 130; 153pp; English.
XX
CC   ACC49051 to ACC49063 encode the human proteins designated NOVX (I), where
CC   X is 1a, 1b, 1c, 2a, 2b, 2c, 2d, 2e, 2f, 2g, 3a, 3b and 3c respectively,
CC   given in ABP97007 to ABP97019. (I) have antidiabetic, neuroprotective,
CC   anorectic, cardiant, hypotensive, antiarteriosclerotic, antibacterial,
CC   virucide, fungicide, protozoacide, anticonvulsant, antiparkinsonian,
CC   nootropic, osteopathic, antiarthritic, antiinflammatory, dermatological,
CC   antiasthmatic, antilipaemic, vulnerary, antiangiogenic and anabolic
CC   activities, and can be used in gene therapy. (I), nucleic acid encoding
CC   (I) and antibodies against (I) are useful in the manufacture of a
CC   medicament for treating a syndrome associated with a human disease,
CC   preferably a NOVX-associated disorder. The nucleic acid molecules,
CC   polypeptides and antibodies are useful for treating, preventing or
CC   diagnosing diseases such metabolic disorders, diabetes, obesity,
CC   infectious diseases (viral, bacterial, fungal, helminthic, and
CC   protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
CC   atherosclerosis), neurodegenerative disorders, Alzheimer's disease,
CC   Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
CC   haematopoietic disorders, inflammatory skin disorders, asthma, and
CC   various dyslipidaemias. The nucleic acids and polypeptides may also be
CC   used as targets for the identification of small molecules that modulate
CC   or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC   haematopoiesis, wound healing and angiogenesis and in gene therapy. The
CC   present sequence represents a PCR primer for a NOV2 sequence, which is
CC   used in an example from the present invention
XX
SQ   Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCC 786
              ||||||||||||
Db         15 CTGAGGGCAGCC 4


RESULT 473
AAQ22447/c
ID   AAQ22447 standard; DNA; 15 BP.
XX
AC   AAQ22447;
XX
DT   05-AUG-1992  (first entry)
XX
DE   Probe (7) for DNA fingerprint analysis.
XX
KW   M13; consensus; hypervariable region; HVR; ss.
XX
OS   Synthetic.
XX
PN   US5097024-A.
XX
PD   17-MAR-1992.
XX
PF   25-SEP-1989;  89US-00411823.
XX
PR   25-SEP-1989;  89US-00411823.
XX
PA   (HODE/) HODES M E.
XX
PI   Hodes ME,  Norris FH,  Hodes MZ;
XX
DR   WPI; 1992-113708/14.
XX
PT   New DNA sequences as DNA probes - for use in paternity and maternity
PT   testing, analysis of tumour cells, animal or plant breeding, etc.
XX
PS   Claim 1; Page 13; 13pp; English.
XX
CC   The DNA probes represented in AAQ22441-76 are 15 nucleotide sequences
CC   wherein 8 nucleotides of each sequence are G, 3 are T, 1 is C, 1 is A and
CC   2 are N, except that the nucleotide sequence is not the M13 consensus
CC   sequence GAGGGTGGNGGNTCT. The probes can detect hyper- variable regions
```

```
CC   (HVRs) in genomic DNA with such precision as to enable individuals to be
CC   identified or fingerprinted by reference to variations in their DNA in
CC   these regions. The DNA probes can be used in paternity and maternity
CC   testing, zygosity testing in twins, cell chimerism studies, e.g.
CC   detection of donor versus recipient cells after bone marrow
CC   transplantation, forensic medicine, family gp. verification, tests for
CC   inbreeding, pedigree analysis, identification of loci or genetic
CC   diseases, animal or plant breeding and pedigree analysis authentication,
CC   quality control of cell lines and analysis. Preparation: The M13 sequence
CC   was initially randomised manually by the method of random sampling
CC   without replacement to produce random sequences. Later a computer
CC   programme was written that implemented an algorithm that produced a
CC   random sequence by sampling without replacement. Several of the random
CC   sequences that were obtd. were synthesised, labelled and used as DNA
CC   probes
XX
SQ   Sequence 15 BP; 2 A; 1 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        528 TCCCAACATCCTCTG 542
              ||||||||||| | |
Db         15 TCCCAACATCCCCCG 1


RESULT 474
AAT52193
ID   AAT52193 standard; RNA; 15 BP.
XX
AC   AAT52193;
XX
DT   25-MAR-2003  (revised)
DT   01-APR-1997  (first entry)
XX
DE   Mouse ICAM hammerhead ribozyme target sequence (nt. position 108).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Mus musculus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 177; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 15 BP; 0 A; 8 C; 3 G; 0 T; 4 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   60.0%;  Pred. No. 2.3e+02;
  Matches    9;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CTCTGCTCCTAGGCC 552
              |:|:||:||: | ||
Db          1 CUCUGCUCCUGGCCC 15


RESULT 475
AAT56282/c
ID   AAT56282 standard; RNA; 15 BP.
XX
AC   AAT56282;
XX
DT   25-MAR-2003  (revised)
DT   14-MAY-1997  (first entry)
XX
DE   Mouse TNF-a hammerhead ribozyme target sequence (nt position 855).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
```

OS Mus musculus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 251; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 604 ACAGAGTACTGACTC 618
|||||| | ||||||
Db 15 ACAGAGCAATGACTC 1

RESULT 476
AAT54975
ID AAT54975 standard; RNA; 15 BP.
XX
AC AAT54975;
XX
DT 25-MAR-2003 (revised)
DT 07-APR-1997 (first entry)
XX
DE Mouse relA hammerhead ribozyme target sequence (nt. position 1681).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Mus musculus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 226; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an

```
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC   nucleotide base position indicated in the DE line. The relA gene product
CC   is a subunit of the transcriptional regulator NF-kappaB and is implicated
CC   specifically in the induction of inflammatory responses. Regions of the
CC   mRNA that do not form secondary folding structures and that contain
CC   potential hammerhead and hairpin ribozyme cleavage sites were identified
CC   by computer analysis. Ribozymes directed against these mRNA sequences
CC   were designed and synthesised with modifications that improve their
CC   nuclease resistance. The ribozymes are designed to cleave the target
CC   sequences and thereby inhibit relA expression, making them potentially
CC   useful for treating rheumatoid arthritis, restenosis and asthma as well
CC   as for increasing tolerance to transplanted tissues. The potential
CC   immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC   that uses are limited to local delivery, acute indications or ex vivo
CC   treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 15 BP; 4 A; 6 C; 1 G; 0 T; 4 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   66.7%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        798 AAGAGCTCTCCTCCA 812
              ||||  :|:||:|||
Db          1 AAGACUUCUCCUCCA 15


RESULT 477
AAT52196
ID   AAT52196 standard; RNA; 15 BP.
XX
AC   AAT52196;
XX
DT   25-MAR-2003  (revised)
DT   01-APR-1997  (first entry)
XX
DE   Mouse ICAM hammerhead ribozyme target sequence (nt. position 120).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Mus musculus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 177; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 15 BP; 0 A; 8 C; 3 G; 0 T; 4 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   60.0%;  Pred. No. 2.3e+02;
  Matches    9;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CTCTGCTCCTAGGCC 552
              |:|:||:||: | ||
Db          1 CUCUGCUCCUGGCCC 15


RESULT 478
AAT52191
ID   AAT52191 standard; RNA; 15 BP.
XX
AC   AAT52191;
XX
DT   25-MAR-2003  (revised)
DT   01-APR-1997  (first entry)
XX
DE   Mouse ICAM hammerhead ribozyme target sequence (nt. position 96).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
```

```
OS   Mus musculus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 177; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 15 BP; 0 A; 8 C; 3 G; 0 T; 4 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   60.0%;  Pred. No. 2.3e+02;
  Matches    9;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CTCTGCTCCTAGGCC 552
              |:|:||:||: | ||
Db          1 CUCUGCUCCUGGCCC 15
```

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RESULT 479
AAT55164
ID   AAT55164 standard; RNA; 15 BP.
XX
AC   AAT55164;
XX
DT   25-MAR-2003  (revised)
DT   22-APR-1997  (first entry)
XX
DE   Human relA hammerhead ribozyme target sequence (nt. position 1681).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 229; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
```

```
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC   nucleotide base position indicated in the DE line. The relA gene product
CC   is a subunit of the transcriptional regulator NF-kappaB and is implicated
CC   specifically in the induction of inflammatory responses. Regions of the
CC   mRNA that do not form secondary folding structures and that contain
CC   potential hammerhead and hairpin ribozyme cleavage sites were identified
CC   by computer analysis. Ribozymes directed against these mRNA sequences
CC   were designed and synthesised with modifications that improve their
CC   nuclease resistance. The ribozymes are designed to cleave the target
CC   sequences and thereby inhibit relA expression, making them potentially
CC   useful for treating rheumatoid arthritis, restenosis and asthma as well
CC   as for increasing tolerance to transplanted tissues. The potential
CC   immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC   that uses are limited to local delivery, acute indications or ex vivo
CC   treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 15 BP; 4 A; 6 C; 1 G; 0 T; 4 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   66.7%;  Pred. No. 2.3e+02;
  Matches   10;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        798 AAGAGCTCTCCTCCA 812
              ||||  :|:||:|||
Db          1 AAGACUUCUCCUCCA 15


RESULT 480
AAT50341
ID   AAT50341 standard; RNA; 15 BP.
XX
AC   AAT50341;
XX
DT   11-MAR-1997  (first entry)
XX
DE   Rabbit CETP HH ribozyme target sequence #1828.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
KW   LDL; ss.
XX
OS   Oryctolagus cuniculus.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US016000.
XX
PR   23-DEC-1994;   94US-00363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Couture L,  Stinchcomb D,  Mcswiggen J,  Bisgaier C,  Pape M;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
PT   useful for preventing or treating initial development, progression or
PT   regression of vascular diseases, esp. familial hypercholesterolaemia.
XX
PS   Claim 4; Page 43; 72pp; English.
XX
CC   AAT50138-T50359 represent target sequences for the rabbit cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-
CC   T50546). CETP is a 74 kD glycoprotein that facilitates neutral lipid
CC   transfer between plasma lipoproteins. The numbering of the targets refers
CC   to the position of the cleavage site in full length CETP. The ribozyme
CC   then binds to 5 nucleotides either side of this site. The ribozymes are
CC   able to cleave mRNA from the gene encoding CETP, thereby blocking
CC   synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse
CC   cholesterol transport (RCT) pathway can be inhibited (or eliminated)
CC   thereby preventing the reduction in size density of the high density
CC   lipoproteins (HDL), prolonging HDL half life, and therefore increasing
CC   HDL levels. The ribozymes can be used to treat conditions associated with
CC   abnormal levels of CETP, specifically atherosclerosis, familial
CC   hypercholesterolaemia, peripheral vascular disease, dyslipidaemia,
CC   hyperbetalipoproteinaemia, hypoalphalipoproteinaemia, vascular
CC   complications of diabetes, transplant, atherectomy and angioplastic
CC   restenosis. By inhibiting CETP, the levels of HDL and low density
CC   lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a
CC   decrease in LDL levels, and a corresponding increase in HDL levels). The
CC   HH ribozymes can also be used diagnostically to study genetic drift and
CC   mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes
CC   target specific regions of the CETP gene, they have low non-specific
CC   activity
XX
SQ   Sequence 15 BP; 0 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   40.0%;  Pred. No. 2.3e+02;
  Matches    6;  Conservative    7;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        822 TGGCTGTGTCTCTTT 836
              :|||:|: :|:|: :
Db          1 UGGCUGUCUCUCUCU 15


RESULT 481
AAV58335
ID   AAV58335 standard; DNA; 15 BP.
XX
AC   AAV58335;
XX
DT   20-NOV-1998  (first entry)
XX
DE   Probe for Human Sec2 coding sequence.
XX
KW   Sec2; alpha(1,2) fucosyltransferase; H blood group; secretor genotyping;
KW   GDP-L-fucose:beta-D-galactoside 2-alpha-L-fucosyltransferase; human;
KW   FUT2; nonsecretor genotyping; probe; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5807732-A.
XX
PD   15-SEP-1998.
XX
PF   28-FEB-1995;   95US-00395800.
XX
PR   28-FEB-1995;   95US-00395800.
XX
PA   (GIOR/) GIORGI D.
PA   (LOWE/) LOWE J B.
PA   (LENN/) LENNON G.
PA   (ROUQ/) ROUQUIER S.
PA   (KELL/) KELLY R J.
XX
PI   Lennon G,  Giorgi D,  Lowe JB,  Rouquier S,  Kelly RJ;
XX
DR   WPI; 1998-520127/44.
XX
PT   DNA encoding fucosyltransferase enzyme - useful for producing recombinant
PT   enzyme and genotyping person as secretor or nonsecretor.
XX
PS   Example; Col 25; 55pp; English.
XX
CC   This sequence is a probe for DNA encoding the human Sec2 protein of the
CC   invention. The DNA encodes a alpha(1,2) fucosyltransferase and is the
CC   Secretor alpha(1,2)fucosyltransferase locus, that cross hybridises with
```

```
CC   the H blood group alpha(1,2)fucosyltransferase gene. The DNA is useful
CC   for producing a recombinant human GDP-L-fucose:beta-D-galactoside 2-alpha
CC   -L-fucosyltransferase (FUT2) which can be used for genotyping an
CC   individual as a secretor or nonsecretor as it is known that nonsecretors
CC   homozygous for a mutant allele of the FUT2 gene that has a stop codon in
CC   the position corresponding to amino acid 143
XX
SQ   Sequence 15 BP; 2 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        541 TGCTCCTAGGCCTCC 555
              ||||||||| ||| |
Db          1 TGCTCCTAGACCTTC 15


RESULT 482
AAV48734
ID   AAV48734 standard; DNA; 15 BP.
XX
AC   AAV48734;
XX
DT   15-OCT-1998  (first entry)
XX
DE   ErbB-2 gene antisense oligonucleotide ErbB-2-26.
XX
KW   ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP856579-A1.
XX
PD   05-AUG-1998.
XX
PF   31-JAN-1997;   97EP-00101531.
XX
PR   31-JAN-1997;   97EP-00101531.
XX
PA   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI   Schlingensiepen K,  Brysch W;
XX
DR   WPI; 1998-400910/35.
XX
PT   Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT   consecutive guanosine or inosine - and have specific ratio of residues
PT   able to form two or three hydrogen bonds, have greater activity and
PT   reduced toxicity, used therapeutically or to modulate growth of cells in
PT   culture.
XX
PS   Claim 10; Fig 6a; 286pp; English.
XX
CC   AAV48709-886 represent antisense oligonucleotides directed against the
CC   ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in
CC   significant redcution in ErbB-2 protein expression, while
CC   oligonucleotides AAV48792-886 had little effect. The oligonucleotides
CC   exemplify the invention. The specification describes oligonucleotides
CC   that contain 8-30 nucleotides, which contain at most 8 nucleotides that
CC   can each form three hydrogen bonds to cytosine; do not contain four
CC   consecutive nucleotides able to form three H-bonds each to four
CC   consecutive cytosines; do not contain two sequences of three consecutive
CC   nucleotides each able to form three H-bonds to three consecutive
CC   cytosines, and the ratio between residues able to form two H-bonds each
CC   (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC   oligonucleotides are used to modulate expression of genes, particularly
CC   the genes for p53, ErB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC   proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC   kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC   oligonucleotides can also be used to analyse function of proteins (by
CC   altering their expression or activity) and therapeutically, e.g. in cases
CC   of cancer or (targeting TGF) for stimulating the immune system
XX
SQ   Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        766 CCTCCACTTCTGAGG 780
              ||||| |||| ||||
Db          1 CCTCCTCTTCAGAGG 15


RESULT 483
AAZ64437/c
ID   AAZ64437 standard; RNA; 15 BP.
XX
AC   AAZ64437;
XX
DT   28-MAR-2000  (first entry)
XX
DE   Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 9027.
XX
KW   Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW   cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW   autoimmune disease; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO9955847-A2.
XX
PD   04-NOV-1999.
XX
PF   26-APR-1999;   99WO-US009027.
XX
PR   27-APR-1998;   98US-0083217P.
PR   18-SEP-1998;   98US-0100842P.
PR   25-FEB-1999;   99US-00257608.
PR   23-MAR-1999;   99US-00274553.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Mcswiggen JA,  Roberts E,  Pavco PA,  Macejak D;
XX
DR   WPI; 2000-062023/05.
XX
PT   Novel ribozymes for the treatment of diseases and conditions related to
PT   hepatitis C infection.
XX
PS   Claim 1; Page 92; 123pp; English.
XX
CC   The present sequence represents the preferred target sequence of an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the Hepatitis C virus (HCV) RNA sequence at the base position given in
CC   the descriptor line. The HCV sequence was screened for optimal ribozyme
CC   target sites using a computer folding algorithm and regions of the mRNA
CC   which did not form secondary folding structures and contained potential
CC   ribozyme cleavage sites were identified. Ribozymes were synthesised to
CC   target these sites and their activities optimised by either varying the
CC   length of the binding arms or by modification to prevent degradation by
CC   nucleases. The ribozymes of the invention inhibit gene expression and/or
CC   viral replication, and are used to treat diseases associated with
CC   Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
CC   hepatocellular carcinoma. The ribozymes may be used in combination with
CC   interferon to treat HCV infection, other infectious diseases, autoimmune
CC   diseases, and cancer
XX
SQ   Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy        717 GGAGAGTGACTCTGG 731
              ||||||| ||| |||
Db         15 GGAGAGTAACTATGG 1


RESULT 484
AAZ62793
ID   AAZ62793 standard; RNA; 15 BP.
XX
AC   AAZ62793;
XX
DT   28-MAR-2000  (first entry)
XX
DE   Substrate for HH ribozyme HCV-7592 which cleaves HCV RNA at nt. 7592.
XX
KW   Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW   cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW   autoimmune disease; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO9955847-A2.
XX
PD   04-NOV-1999.
XX
PF   26-APR-1999;   99WO-US009027.
XX
PR   27-APR-1998;   98US-0083217P.
PR   18-SEP-1998;   98US-0100842P.
PR   25-FEB-1999;   99US-00257608.
PR   23-MAR-1999;   99US-00274553.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Mcswiggen JA,  Roberts E,  Pavco PA,  Macejak D;
XX
DR   WPI; 2000-062023/05.
XX
PT   Novel ribozymes for the treatment of diseases and conditions related to
PT   hepatitis C infection.
XX
PS   Claim 1; Page 63; 123pp; English.
XX
CC   The present sequence represents the preferred target sequence of an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the Hepatitis C virus (HCV) RNA sequence at the base position given in
CC   the descriptor line. The HCV sequence was screened for optimal ribozyme
CC   target sites using a computer folding algorithm and regions of the mRNA
CC   which did not form secondary folding structures and contained potential
CC   ribozyme cleavage sites were identified. Ribozymes were synthesised to
CC   target these sites and their activities optimised by either varying the
CC   length of the binding arms or by modification to prevent degradation by
CC   nucleases. The ribozymes of the invention inhibit gene expression and/or
CC   viral replication, and are used to treat diseases associated with
CC   Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
CC   hepatocellular carcinoma. The ribozymes may be used in combination with
CC   interferon to treat HCV infection, other infectious diseases, autoimmune
CC   diseases, and cancer
XX
SQ   Sequence 15 BP; 2 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   53.3%;  Pred. No. 2.3e+02;
  Matches    8;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        533 ACATCCTCTGCTCCT 547
              |||:| :|:||: |:
Db          1 ACAUCGUCUGCUGCU 15


RESULT 485
AAH18948/c
ID   AAH18948 standard; DNA; 15 BP.
XX
AC   AAH18948;
XX
DT   21-JUN-2001  (first entry)
XX
DE   UCP3 polymorphism detection allele specific primer #61.
XX
KW   UCP3; uncoupling protein 3; polymorphism; obesity; diabetes mellitus; ss.
XX
OS   Homo sapiens.
XX
PN   WO200118232-A2.
XX
PD   15-MAR-2001.
XX
PF   08-SEP-2000; 2000WO-US024784.
XX
PR   08-SEP-1999;   99US-0152789P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
PA   (STEP/) STEPHENS J C.
XX
PI   Chew A,  Choi JY,  Denton RR,  Nandabalan K;
XX
DR   WPI; 2001-218562/22.
XX
PT   Nucleic acids encoding uncoupling protein 3 (mitochondrial, proton
PT   carrier) (UCP3) proteins comprising single nucleotide polymorphisms,
PT   useful for the design of drugs for treating obesity.
XX
PS   Claim 15; Page 22; 94pp; English.
XX
CC   The present invention relates to the human uncoupling protein 3
CC   (mitochondrial, proton carrier) (UCP3) gene and polymorphisms. The
CC   polymorphisms are associated with obesity, especially diabetes mellitus
CC   associated obesity. They polymorphisms may be identified and analysed to
CC   determine whether an individual is susceptible to obesity and may be used
CC   as the basis for targeted design of drugs to treat obesity. The present
CC   sequence was used in the identification and amplification of UCP3
CC   polymorphisms
XX
SQ   Sequence 15 BP; 2 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        548 AGGCCTCCCCAGCGA 562
              ||||||| |||| ||
Db         15 AGGCCTCACCAGTGA 1


RESULT 486
AAD05856/c
ID   AAD05856 standard; DNA; 15 BP.
XX
AC   AAD05856;
XX
DT   31-JUL-2001  (first entry)
XX
DE   Human cholinergic receptor, muscarinic 3 gene ASO probe #8.
XX
KW   Human; cholinergic receptor muscarinic 3; CHRM3; drug screening;
KW   single nucleotide polymorphism; forensic application; gene therapy;
KW   Alzheimer's disease; Sjogren's syndrome; smooth muscle contractility;
KW   sudden infant death syndrome; genotyping; haplotyping;
KW   chromosome 1q41-q44; ASO; allele-specific oligonucleotide; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200129176-A2.
XX
PD   26-APR-2001.
```

XX
PF 12-OCT-2000; 2000WO-US028247.
XX
PR 15-OCT-1999; 99US-0159860P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Choi JY, Denton RR, Nandabalan K, Stephens JC;
XX
DR WPI; 2001-300326/31.
XX
PT Novel polymorphic variant of reference sequence for human cholinergic
PT receptor, muscarinic 3 gene, useful for diagnostic and therapeutic
PT purposes.
XX
PS Claim 15; Page 19; 54pp; English.
XX
CC The patent relates to polymorphic variants of human cholinergic receptor,
CC muscarinic 3 (CHRM3) gene. The polymorphic variant comprises at least one
CC single nucleotide polymorphism selected from cytosine at PS1, adenine at
CC PS2 or PS3, and cytosine at PS4. The invention also relates to a method
CC for genotyping and haplotyping the CHRM3 gene for identification of
CC variants. The polymorphic variant is useful for therapeutic purposes, for
CC studying the expression and biological function of CHRM3, as well as for
CC developing drugs targetting the CHRM3 protein. The variant is also useful
CC in diagnostics and forensic applications. The recombinant nonhuman
CC organism transfected with the polymorphic variant is useful for studying
CC expression of CHRM3 isogenes in vivo, for in vivo screening and testing
CC of drugs targetted against CHRM3 protein, and for testing the efficacy of
CC therapeutic agents and compounds for Alzheimer's disease, Sjogren's
CC syndrome, disorders associated with smooth muscle contractility and
CC sudden infant death syndrome. The CHRM3 protein variant is useful in drug
CC screening assays and its antibodies are useful in immunoassays to detect
CC CHRM3 protein variants in biological samples. The present sequence is an
CC allele-specific oligonucleotide (ASO) probe used for detecting human
CC CHRM3 gene polymorphism
XX
SQ Sequence 15 BP; 5 A; 5 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 613 TGACTCTGCCTGGTT 627
||||||| |||| |
Db 15 TGACTCTGGCTGGAT 1

RESULT 487
AAF49935
ID AAF49935 standard; DNA; 15 BP.
XX
AC AAF49935;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #895.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 66; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 532 AACATCCTCTGCTCC 546
||||||||| || ||
Db 1 AACATCCTCAGCGCC 15

RESULT 488
AAF47907/c
ID AAF47907 standard; DNA; 15 BP.
XX
AC AAF47907;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #1327.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX

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PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ, Werther GA, Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 52; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        637 GGCTCCTAAGTCACA 651
              | | ||||||||||||
Db         15 GCCGCCTAAGTCACA 1


RESULT 489
AAF52792
ID   AAF52792 standard; DNA; 15 BP.
XX
AC   AAF52792;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #3752.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ, Werther GA, Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 85; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        874 ACTTTCCTGAGATGC 888
              ||| |||||| ||||
Db          1 ACTGTCCTGACATGC 15


RESULT 490
AAF49934
ID   AAF49934 standard; DNA; 15 BP.
XX
AC   AAF49934;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #894.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ, Werther GA, Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
```

```
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 66; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        531 CAACATCCTCTGCTC 545
              ||||||||||  || |
Db          1 CAACATCCTCAGCGC 15


RESULT 491
AAF47290
ID   AAF47290 standard; DNA; 15 BP.
XX
AC   AAF47290;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #710.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 48; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        565 TCCTCCCAGACCAAG 579
              ||||||  || |||||
Db          1 TCCTCCGAGTCCAAG 15


RESULT 492
AAF47905/c
ID   AAF47905 standard; DNA; 15 BP.
XX
AC   AAF47905;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1325.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 52; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
```

```
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        639 CTCCTAAGTCACAGA 653
              | ||||||||||| |
Db         15 CGCCTAAGTCACAAA 1


RESULT 493
AAF48903
ID   AAF48903 standard; DNA; 15 BP.
XX
AC   AAF48903;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2323.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 59; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        795 GCCAAGAGCTCTCCT 809
              || ||||||||||
Db          1 GCATAGAGCTCTCCT 15


RESULT 494
AAF47379
ID   AAF47379 standard; DNA; 15 BP.
XX
AC   AAF47379;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #799.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 49; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
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CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        709 GAGTCCCAGGAGAGT 723
              ||||||||||  | ||
Db          1 GAGTCCCAGGGGTGT 15


RESULT 495
AAF48554/c
ID   AAF48554 standard; DNA; 15 BP.
XX
AC   AAF48554;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1974.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 57; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 1 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        549 GGCCTCCCCAGCGAG 563
              || |||||||||| ||
Db         15 GGGCTCCCCAGCAAG 1


RESULT 496
AAF47908/c
ID   AAF47908 standard; DNA; 15 BP.
XX
AC   AAF47908;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1328.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 52; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
```

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  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        636 AGGCTCCTAAGTCAC 650
              || | ||||||||||
Db         15 AGCCGCCTAAGTCAC 1


RESULT 497
AAF48907
ID   AAF48907 standard; DNA; 15 BP.
XX
AC   AAF48907;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2327.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 59; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 4 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        799 AGAGCTCTCCTCCAA 813
              ||||||||||| ||
Db          1 AGAGCTCTCCTTGAA 15


RESULT 498
AAF48902
ID   AAF48902 standard; DNA; 15 BP.
XX
AC   AAF48902;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2322.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 59; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        794 TGCCAAGAGCTCTCC 808
              |||  ||||||||||
Db          1 TGCATAGAGCTCTCC 15
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RESULT 499
AAF47289
ID   AAF47289 standard; DNA; 15 BP.
XX
AC   AAF47289;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #709.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 48; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 3 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        564 CTCCTCCCAGACCAA 578
              ||||||| || ||||
Db          1 CTCCTCCGAGTCCAA 15


RESULT 500
AAF47496/c
ID   AAF47496 standard; DNA; 15 BP.
XX
AC   AAF47496;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #916.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 50; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        628 CCTGAGAGAGGCTCC 642
              |||| ||||||||| |
Db         15 CCTGGGAGAGGCTGC 1


RESULT 501
AAF48553/c
ID   AAF48553 standard; DNA; 15 BP.
XX
AC   AAF48553;
XX
DT   30-MAR-2001  (first entry)
XX
```

```
DE   IGFBP3 oligonucleotide #1973.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 57; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 1 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        550 GCCTCCCCAGCGAGC 564
              | ||||||||| |||
Db         15 GGCTCCCCAGCAAGC 1


RESULT 502
AAF48618/c
ID   AAF48618 standard; DNA; 15 BP.
XX
AC   AAF48618;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2038.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 57; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        715 CAGGAGAGTGACTCT 729
              || |||| |||||||
Db         15 CATGAGAATGACTCT 1


RESULT 503
AAF70083
ID   AAF70083 standard; DNA; 15 BP.
XX
AC   AAF70083;
XX
DT   18-APR-2001  (first entry)
XX
DE   Human TNFRSF11B gene ASO probe, SEQ ID NO: 139.
XX
KW   Human; TNFRSF11B; osteoclastogenesis inhibitory factor;
KW   single nucleotide polymorphism; SNP; osteoclast recruitment;
KW   osteoclast function; osteoporosis; metastatic bone disease;
KW   Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
KW   allele-specific oligonucleotide; probe; ss.
XX
```

OS Homo sapiens.
XX
PN WO200104137-A1.
XX
PD 18-JAN-2001.
XX
PF 10-JUL-2000; 2000WO-US018803.
XX
PR 09-JUL-1999; 99US-0143020P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
XX
DR WPI; 2001-147175/15.
XX
PT Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single
PT nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's
PT disease and rheumatoid arthritis.
XX
PS Claim 15; Page 23; 114pp; English.
XX
CC The present sequence is a probe used to detect polymorphisms in the human
CC osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides
CC comprising one or more of twenty four novel single nucleotide
CC polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B
CC regulate osteoclast recruitment and function. An understanding of
CC variations in the gene should thus be useful in developing new therapies
CC for metabolic disorders caused by abnormal osteoclast recruitment and
CC function such as osteoporosis, metastatic bone disease, Paget's disease,
CC rheumatoid arthritis and periodontal bone disease
XX
SQ Sequence 15 BP; 5 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 841 CTCTGAAGACAGCGT 855
|| |||| |||||||
Db 1 CTGTGAAAACAGCGT 15

RESULT 504
ABA97405
ID ABA97405 standard; DNA; 15 BP.
XX
AC ABA97405;
XX
DT 18-JUN-2002 (first entry)
XX
DE Nucleotide sequence of oligomer # 12 used to compare mismatches.
XX
KW Protein nucleic acid molecule; PNA; ds.
XX
OS Synthetic.
XX
PN WO200168673-A1.
XX
PD 20-SEP-2001.
XX
PF 13-MAR-2001; 2001WO-US008111.
XX
PR 14-MAR-2000; 2000US-0189190P.
PR 30-NOV-2000; 2000US-0250334P.
XX
PA (ACTI-) ACTIVE MOTIF.
XX
PI Efimov V, Fernandez J, Archdeacon D, Archdeacon J;
PI Chakhmakhcheau O, Buryakova A, Choob M, Hondorp K;
XX
DR WPI; 2002-041177/05.
XX
PT Oligonucleotides analogs useful in detection, separation and purification
PT of nucleic acid molecules, comprise monomers, dimers and oligomers.
XX
PS Example 20; Page 123; 197pp; English.
XX
CC This invention relates to oligonucleotide analogues comprising a protein
CC nucleic acid molecule (PNA) monomer. They are used in the detection and
CC separation of nucleic acid molecules and as probes, primers, linkers,
CC adapters and antisense agents on solid supports. Modifications enhance
CC their use as capture and detection probes e.g. by the incorporation of
CC biotin, digoxigenen, radioisotopes, fluorescent labels such as
CC fluorescein and reporter molecules such as alkaline phosphatase. They are
CC also used for enhancing or inhibiting the activity of an enzyme or
CC cellular activity. The compounds are stable to nucleases and proteases,
CC have high affinity, binding specificity and solubility. The polyamide
CC backbone of PNAs is resistant to both nucleases and proteases. PNAs bind
CC nucleic acid molecules with greater affinity than DNA or RNA
CC concentration. The compounds are relatively simple to synthesize and are
CC used in a wide variety of applications. This sequence represents a DNA
CC oligomer which is used to represent the effect of single base mismatches
CC on oligonucleotides
XX
SQ Sequence 15 BP; 0 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 582 TTTTGTTCTGTTTTT 596
|||| |||| |||||
Db 1 TTTTTTTCTTTTTTT 15

RESULT 505
ABQ96112
ID ABQ96112 standard; DNA; 15 BP.
XX
AC ABQ96112;
XX
DT 28-OCT-2002 (first entry)
XX
DE Tumour suppression-related oligonucleotide #1763.
XX
KW Tumour; cytostatic; antiviral; neuroprotective; nootropic; neuroleptic;
KW tumour suppression; tumour reversion; apoptosis; viral resistance; human;
KW viral infection; cell degeneration disease; neurodegeneration; ds;
KW Alzheimer's disease; schizophrenia; immune disease; inflammatory disease.
XX
OS Homo sapiens.
XX
PN FR2819824-A1.
XX
PD 26-JUL-2002.
XX
PF 23-JAN-2001; 2001FR-00000899.
XX
PR 23-JAN-2001; 2001FR-00000899.
XX
PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI Telerman A, Amson R, Tuijnder M, Susini L;
XX
DR WPI; 2002-610803/66.
XX
PT New nucleic acid implicated e.g. in tumor suppression, useful for
PT diagnosis of tumors, viral infection and cellular degeneration and for
PT drug screening.
XX
PS Claim 1; Page 486; 623pp; French.
XX
CC The present invention relates to novel human nucleic acid sequences (I).
CC The present sequence is one such nucleic acid sequence. Expression of (I)
CC are implicated in tumour suppression or reversion and apoptosis and viral

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CC   resistance. (I) are useful as probes or primers for detecting,
CC   identifying, measuring and/or amplifying nucleic acid sequences, as
CC   antisense reagents and for recombinant production of polypeptides. (I),
CC   polypeptides (II) encoded by (I), vector containing (I), cells containing
CC   these vectors and antibodies (Ab) against (II) are all useful for
CC   treatment/prevention of viral, tumour and cell degeneration diseases
CC   (especially neurodegeneration, such as Alzheimer's disease and
CC   schizophrenia). Analysing the expression of (I) is also useful for
CC   diagnosis and/or prognosis of such diseases. Transgenic animals carrying
CC   (I) are used for studying the aetiology of these diseases (also immune
CC   and inflammatory diseases). Note: In the present specification, SEQ ID 1
CC   to 2280 are claimed in Claim 1, however only SEQ ID 1 to 2270 are shown
CC   in the specification
XX
SQ   Sequence 15 BP; 4 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        867 TTGGAACACTTTCCT 881
              ||||||  | ||||||
Db          1 TTGGAAAATTTTCCT 15


RESULT 506
ABK14045/c
ID   ABK14045 standard; DNA; 15 BP.
XX
AC   ABK14045;
XX
DT   08-MAY-2002  (first entry)
XX
DE   ASO probe #6, used to detect human HMGCL gene polymorphisms.
XX
KW   Human; 3-hydroxy-3-methylglutaryl coenzyme A lyase; HMGCL; probe; ss;
KW   single nucleotide polymorphism; SNP; haplotyping; genotyping; ASO.
XX
OS   Homo sapiens.
XX
PN   WO200198315-A2.
XX
PD   27-DEC-2001.
XX
PF   20-JUN-2001; 2001WO-US019834.
XX
PR   20-JUN-2000; 2000US-0212782P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Duda A,  Kliem SE,  Koshy B,  Parks KE;
XX
DR   WPI; 2002-130786/17.
XX
PT   Novel genetic variants of 3-hydroxy-3-methylglutaryl coenzyme A lyase
PT   useful in screening drugs to treat disease associated with the protein
PT   e.g. 3-hydroxy-3-methylglutaryl coenzyme A deficiency.
XX
PS   Claim 17; Page 13; 84pp; English.
XX
CC   The present invention relates to a new polynucleotide having a sequence
CC   comprising a 3-hydroxy-3-methylglutaryl coenzyme A lyase (HMGCL) isogene,
CC   selected from 6 isogenes, and defined by a corresponding set of
CC   polymorphisms whose locations and identities are given in the
CC   specification. The method of the invention is useful for haplotyping the
CC   HMGCL gene in an individual and in design of clinical trials of candidate
CC   drugs for treating a specific condition or disease predicted to be
CC   associated with HMGCL activity and is useful for genotyping HMGCL gene of
CC   an individual. The method of the invention is also useful for identifying
CC   an association between a trait and at least one haplotype or haplotype
CC   pair of HMGCL gene. ASO is useful as probes and primers and for assaying
CC   a polymorphism in the target region. The invention is useful for
CC   genotyping and/or haplotyping the HMGCL gene in an individual. Without
CC   requiring any a prior knowledge of the phenotypic effect of any
CC   particular HMGCL haplotype or haplotype pair, the method of the invention
CC   provides the scientist with a tool to identify lead compounds that are
CC   more likely to show efficacy in clinical trials. The present nucleic acid
CC   sequence represents one of a collection of ASO probes (ABK14040-ABK14045)
CC   that were used in the invention to detect polymorphisms in the human
CC   HMGCL gene
XX
SQ   Sequence 15 BP; 5 A; 3 C; 3 G; 3 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        874 ACTTTCCTGAGATGC 888
              | |||||  |||||||
Db         15 ATTTTCCRGAGATGC 1


RESULT 507
ABX01490/c
ID   ABX01490 standard; RNA; 15 BP.
XX
AC   ABX01490;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Hepatitis C virus substrate #1272 for HCV hammerhead ribozyme #1272.
XX
KW   Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW   HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW   liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW   type I interferon; interferon alpha; interferon beta; cytostatic;
KW   interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW   substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
OS   Hepatitis C virus.
XX
PN   US2002082225-A1.
XX
PD   27-JUN-2002.
XX
PF   23-MAR-1999;   99US-00274553.
XX
PR   23-MAR-1999;   99US-00274553.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
PA   (ROBE/) ROBERTS B.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  Mcswiggen JA,  Roberts B,  Pavco PA,  Macejack D;
XX
DR   WPI; 2002-617759/66.
XX
PT   New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
PT   replication and are useful to treat hepatitis C virus infections and
PT   cirrhosis, liver failure or hepatocellular carcinoma.
XX
PS   Claim 1; Page 57; 80pp; English.
XX
CC   The present invention relates to enzymatic nucleic acids which
CC   specifically cleave RNA derived from Hepatitis C virus (HCV). The
CC   enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
CC   (HP) motif where the binding arms comprise sequences complementary to one
CC   of the substrate sequences defined in the specification. The HCV
CC   ribozymes are useful for modulating the expression and/or replication of
CC   HCV. They can be used to treat cirrhosis, liver failure and/or
CC   hepatocellular carcinoma. The HCV ribozymes are also useful for treating
CC   a condition associated with HCV infection in conjunction with one or more
CC   other drug therapies, particularly type I interferon, especially
CC   interferon alpha, beta or gamma or consensus interferon. The present
```

```
CC   sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
CC   Some of the sequence data for this patent did not form part of the
CC   printed specification. The complete sequence data for this patent was
CC   obtained in electronic format directly from the USPTO web site at
CC   seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ   Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        717 GGAGAGTGACTCTGG 731
              ||||||| ||| |||
Db         15 GGAGAGTAACTATGG 1


RESULT 508
ABX00644
ID   ABX00644 standard; RNA; 15 BP.
XX
AC   ABX00644;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Hepatitis C virus substrate #426 for HCV hammerhead ribozyme #426.
XX
KW   Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW   HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW   liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW   type I interferon; interferon alpha; interferon beta; cytostatic;
KW   interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW   substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
OS   Hepatitis C virus.
XX
PN   US2002082225-A1.
XX
PD   27-JUN-2002.
XX
PF   23-MAR-1999;   99US-00274553.
XX
PR   23-MAR-1999;   99US-00274553.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
PA   (ROBE/) ROBERTS B.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  Mcswiggen JA,  Roberts B,  Pavco PA,  Macejack D;
XX
DR   WPI; 2002-617759/66.
XX
PT   New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
PT   replication and are useful to treat hepatitis C virus infections and
PT   cirrhosis, liver failure or hepatocellular carcinoma.
XX
PS   Claim 1; Page 33; 80pp; English.
XX
CC   The present invention relates to enzymatic nucleic acids which
CC   specifically cleave RNA derived from Hepatitis C virus (HCV). The
CC   enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
CC   (HP) motif where the binding arms comprise sequences complementary to one
CC   of the substrate sequences defined in the specification. The HCV
CC   ribozymes are useful for modulating the expression and/or replication of
CC   HCV. They can be used to treat cirrhosis, liver failure and/or
CC   hepatocellular carcinoma. The HCV ribozymes are also useful for treating
CC   a condition associated with HCV infection in conjunction with one or more
CC   other drug therapies, particularly type I interferon, especially
CC   interferon alpha, beta or gamma or consensus interferon. The present
CC   sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
CC   Some of the sequence data for this patent did not form part of the
CC   printed specification. The complete sequence data for this patent was
CC   obtained in electronic format directly from the USPTO web site at
CC   seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ   Sequence 15 BP; 2 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   53.3%;  Pred. No. 2.3e+02;
  Matches    8;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        533 ACATCCTCTGCTCCT 547
              |||:| :|:||: |:
Db          1 ACAUCGUCUGCUGCU 15


RESULT 509
AAL48091/c
ID   AAL48091 standard; DNA; 15 BP.
XX
AC   AAL48091;
XX
DT   27-SEP-2002  (first entry)
XX
DE   Human neuropeptide Y allele specific probe SEQ ID NO: 15.
XX
KW   Human; neuropeptide Y; NPY; isogene; SNP; atherosclerosis; obesity;
KW   psychological disorder; single nucleotide polymorphism; alcoholism;
KW   antiarteriosclerotic; anorectic; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200251857-A1.
XX
PD   04-JUL-2002.
XX
PF   21-DEC-2000; 2000WO-US034758.
XX
PR   21-DEC-2000; 2000WO-US034758.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Lanz EM,  Nandabalan K,  Stephens JC;
XX
DR   WPI; 2002-566671/60.
XX
PT   New genetic variants of the human Neuropeptide Y (NPY) gene useful for
PT   treating disorders affected by abnormal expression or function of NPY
PT   isogene e.g., atherosclerosis or obesity.
XX
PS   Claim 11; Page 16; 80pp; English.
XX
CC   The present invention provides the human neuropeptide Y (NPY) gene and
CC   single nucleotide polymorphisms (SNPs) identified therein. The sequence
CC   can be used in the treatment of disorders associated with NPY, including
CC   atherosclerosis, obesity, psychological disorders and alcoholism. The
CC   present sequence is an allele specific probe used to isolate the human
CC   NPY coding sequence
XX
SQ   Sequence 15 BP; 7 A; 4 C; 4 G; 0 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTCT 839
              ||| ||| |||||||
Db         15 CTGGGTCGCTTTTCT 1


RESULT 510
AAL48090/c
ID   AAL48090 standard; DNA; 15 BP.
XX
```

```
AC   AAL48090;
XX
DT   27-SEP-2002  (first entry)
XX
DE   Human neuropeptide Y allele specific probe SEQ ID NO: 14.
XX
KW   Human; neuropeptide Y; NPY; isogene; SNP; atherosclerosis; obesity;
KW   psychological disorder; single nucleotide polymorphism; alcoholism;
KW   antiarteriosclerotic; anorectic; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200251857-A1.
XX
PD   04-JUL-2002.
XX
PF   21-DEC-2000; 2000WO-US034758.
XX
PR   21-DEC-2000; 2000WO-US034758.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Lanz EM,  Nandabalan K,  Stephens JC;
XX
DR   WPI; 2002-566671/60.
XX
PT   New genetic variants of the human Neuropeptide Y (NPY) gene useful for
PT   treating disorders affected by abnormal expression or function of NPY
PT   isogene e.g., atherosclerosis or obesity.
XX
PS   Claim 11; Page 16; 80pp; English.
XX
CC   The present invention provides the human neuropeptide Y (NPY) gene and
CC   single nucleotide polymorphisms (SNPs) identified therein. The sequence
CC   can be used in the treatment of disorders associated with NPY, including
CC   atherosclerosis, obesity, psychological disorders and alcoholism. The
CC   present sequence is an allele specific probe used to isolate the human
CC   NPY coding sequence
XX
SQ   Sequence 15 BP; 7 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        825 CTGTGTCTCTTTTCT 839
              ||| ||| |||||||
Db         15 CTGGGTCACTTTTCT 1


RESULT 511
ABK98166
ID   ABK98166 standard; DNA; 15 BP.
XX
AC   ABK98166;
XX
DT   07-OCT-2002  (first entry)
XX
DE   Triple helix forming associated oligonucleotide #36.
XX
KW   Triple-helix formation; purine-rich target sequence; double-helix DNA;
KW   gene expression; regulatory sequence; pathogenic double-stranded DNA;
KW   pathogenic bacteria; virus; replication; virulence; cancer;
KW   oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.
XX
OS   Synthetic.
XX
PN   US6403302-B1.
XX
PD   11-JUN-2002.
XX
PF   16-DEC-1993;   93US-00168920.
XX
PR   17-SEP-1992;   92US-00946976.
XX
PA   (CALY ) CALIFORNIA INST OF TECHNOLOGY.
XX
PI   Dervan PB,  Beal PA;
XX
DR   WPI; 2002-536030/57.
XX
PT   A triple-helix comprising a double helical nucleic acid (DHNA) and an
PT   oligonucleotide which binds in parallel and antiparallel orientation,
PT   respectively, for targetting sequences on alternate strands of DHNA to
PT   control gene expression.
XX
PS   Example 6; Fig 20A; 108pp; English.
XX
CC   The present invention relates to methods and oligonucleotides for forming
CC   a triple-helix comprising a double helical nucleic acid comprising first
CC   and second substantially complementary strands, and an oligonucleotide
CC   bound to a purine-rich target sequence within the double helical nucleic
CC   acid, where the oligonucleotide binds in a parallel and antiparallel
CC   orientation, respectively, to target sequences on alternate strands of
CC   the double helical nucleic acid. The method has therapeutic applications,
CC   where gene expression is controlled by selective triple-helix formation
CC   within expression regulatory sequences of a target gene. The
CC   oligonucleotides can be used to form triple-helices, and are useful to
CC   detect the presence or absence of specific sequences within genomic DNA
CC   for diagnostic and therapeutic purposes. The oligonucleotides can be
CC   selected to specifically bind to pathogenic double-stranded DNA including
CC   specific sequences required by pathogenic bacteria or viruses for
CC   replication or virulence, reducing their pathogenicity. Alternatively,
CC   the oligonucleotide can be chosen to target a unique sequence of the
CC   pathogen which is not found in the genome of pathogen's host. The
CC   oligonucleotides can be used in cancer treatment by way of triple-helix
CC   suppression of specific oncogenes including those of endogenous or viral
CC   origin. Such therapeutic oligonucleotides are capable of forming triple-
CC   helices with such sequences in cancerous cells containing the activated
CC   oncogene, so preferentially killing or repressing the cancer causing
CC   cell. The present sequence represents an oligonucleotide used in the
CC   methods of the present invention
XX
SQ   Sequence 15 BP; 0 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        582 TTTTGTTCTGTTTTT 596
              |||| |||| |||||
Db          1 TTTTTTTCTTTTTTT 15


RESULT 512
ABK98185
ID   ABK98185 standard; DNA; 15 BP.
XX
AC   ABK98185;
XX
DT   07-OCT-2002  (first entry)
XX
DE   Triple helix forming associated oligonucleotide #49.
XX
KW   Triple-helix formation; purine-rich target sequence; double-helix DNA;
KW   gene expression; regulatory sequence; pathogenic double-stranded DNA;
KW   pathogenic bacteria; virus; replication; virulence; cancer;
KW   oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.
XX
OS   Synthetic.
XX
PN   US6403302-B1.
XX
PD   11-JUN-2002.
XX
PF   16-DEC-1993;   93US-00168920.
```

```
XX
PR   17-SEP-1992;   92US-00946976.
XX
PA   (CALY ) CALIFORNIA INST OF TECHNOLOGY.
XX
PI   Dervan PB,  Beal PA;
XX
DR   WPI; 2002-536030/57.
XX
PT   A triple-helix comprising a double helical nucleic acid (DHNA) and an
PT   oligonucleotide which binds in parallel and antiparallel orientation,
PT   respectively, for targetting sequences on alternate strands of DHNA to
PT   control gene expression.
XX
PS   Example 7; Fig 24A; 108pp; English.
XX
CC   The present invention relates to methods and oligonucleotides for forming
CC   a triple-helix comprising a double helical nucleic acid comprising first
CC   and second substantially complementary strands, and an oligonucleotide
CC   bound to a purine-rich target sequence within the double helical nucleic
CC   acid, where the oligonucleotide binds in a parallel and antiparallel
CC   orientation, respectively, to target sequences on alternate strands of
CC   the double helical nucleic acid. The method has therapeutic applications,
CC   where gene expression is controlled by selective triple-helix formation
CC   within expression regulatory sequences of a target gene. The
CC   oligonucleotides can be used to form triple-helices, and are useful to
CC   detect the presence or absence of specific sequences within genomic DNA
CC   for diagnostic and therapeutic purposes. The oligonucleotides can be
CC   selected to specifically bind to pathogenic double-stranded DNA including
CC   specific sequences required by pathogenic bacteria or viruses for
CC   replication or virulence, reducing their pathogenicity. Alternatively,
CC   the oligonucleotide can be chosen to target a unique sequence of the
CC   pathogen which is not found in the genome of pathogen's host. The
CC   oligonucleotides can be used in cancer treatment by way of triple-helix
CC   suppression of specific oncogenes including those of endogenous or viral
CC   origin. Such therapeutic oligonucleotides are capable of forming triple-
CC   helices with such sequences in cancerous cells containing the activated
CC   oncogene, so preferentially killing or repressing the cancer causing
CC   cell. The present sequence represents an oligonucleotide used in the
CC   methods of the present invention
XX
SQ   Sequence 15 BP; 0 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        582 TTTTGTTCTGTTTTT 596
              |||| |||| |||||
Db          1 TTTTTTTCTTTTTTT 15


RESULT 513
ACD56198
ID   ACD56198 standard; RNA; 15 BP.
XX
AC   ACD56198;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HBV enzymatic nucleic acid substrate sequence #87.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 214; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   enzymatic nucleic acid sequences disclosed in the present invention
XX
SQ   Sequence 15 BP; 1 A; 6 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   60.0%;  Pred. No. 2.3e+02;
  Matches    9;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        540 CTGCTCCTAGGCCTC 554
              |:||: |:| |||:|
Db          1 CUGCUGCUAUGCCUC 15


RESULT 514
ADB68522
ID   ADB68522 standard; DNA; 15 BP.
XX
AC   ADB68522;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Single-base mismatch oligonucleotide SEQ ID 12 DNA.
XX
KW   hydroxyproline nucleic acid; HypNA; PNA; peptide nucleic acid;
```

KW gene expression; respiration; secretion; signalling;
KW ion-channel activity; cell motility; developmental phenotype;
KW tumour regression; single-base mismatch; ss;
KW phosphono-peptide nucleic acid; pPNA.
XX
OS Synthetic.
XX
PN WO2003068798-A2.
XX
PD 21-AUG-2003.
XX
PF 07-FEB-2003; 2003WO-US003904.
XX
PR 09-FEB-2002; 2002US-00072975.
XX
PA (ACTI-) ACTIVE MOTIF.
XX
PI Efimov V, Fernandez J, Archdeacon D, Archdeachon J, Choob M;
XX
DR WPI; 2003-689653/65.
XX
PT Method of inhibiting expression of genes or RNA transcripts, useful for
PT therapy and determining effects of genes, by administering oligomers
PT containing hydroxyproline nucleic acid.
XX
PS Disclosure; Page 234; 240pp; English.
XX
CC The invention relates to a novel method of inhibiting the expression of
CC one or more genes or RNA transcripts by administering at least one
CC oligonucleotide analogue that includes at least one hydroxyproline
CC nucleic acid (HypNA) monomer to a cell or organism or their extracts. Thr
CC oligonucleotides of the invention may be used to monitor properties
CC including gene expression, respiration, secretion, signalling, ion-
CC channel activity, cell motility, developmental phenotype and tumour
CC regression. Furthermore, they may be utilised to determine the effects of
CC particular genes, as antisense or homologous recombination constructs
CC e.g. for creating animal models of disease and finally, for increasing
CC the activity of some enzymes, such as polymerases. The current sequence
CC is that of the single-base mismatch oligonucleotide SEQ ID 12 DNA of the
CC invention. This sequence may also comprise a peptide nucleic acid (PNA),
CC a phosphono-PNA (pPNA) or a HypNA.
XX
SQ Sequence 15 BP; 0 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        582 TTTTGTTCTGTTTTT 596
              |||| |||| |||||
Db          1 TTTTTTTCTTTTTTT 15
```

RESULT 515
ADD71431/c
ID ADD71431 standard; DNA; 15 BP.
XX
AC ADD71431;
XX
DT 15-JAN-2004 (first entry)
XX
DE Stimulus-responsive DNA organization oligonucleotide #1.
XX
KW ss; stimulus-responsive DNA organization; supercoil; rotation;
KW external stimulus; medical micromachines; artificial muscle.
XX
OS Synthetic.
XX
PN WO2003072772-A1.
XX
PD 04-SEP-2003.
XX
PF 28-AUG-2002; 2002WO-JP008656.
XX
PR 27-FEB-2002; 2002JP-00051927.
XX
PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.
XX
PI Yui N, Ootani T;
XX
DR WPI; 2003-679952/64.
XX
PT Stimulus-responsive DNA organization of highly compatible functional
PT material undergoing reversible formation/dissociation of supercoil or
PT rotation in response to external stimulus, useful as e.g. artificial
PT muscles.
XX
PS Example 1; SEQ ID NO 1; 29pp; Japanese.
XX
CC The invention relates to a stimulus-responsive DNA organization
CC undergoing formation/dissociation of a supercoil or rotation in response
CC to an external stimulus and comprises a number of plasmid DNAs ligated in
CC it. The DNA organization is applicable in various materials and body
CC parts or medical micromachines e.g. artificial muscles. This sequence
CC represents an oligonucleotide used in the method of the invention.
XX
SQ Sequence 15 BP; 10 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        828 TGTCTCTTTTCTTCT 842
              | |||| ||||||||
Db         15 TTTCTCCTTTCTTCT 1
```

RESULT 516
ADE14002/c
ID ADE14002 standard; DNA; 15 BP.
XX
AC ADE14002;
XX
DT 29-JAN-2004 (first entry)
XX
DE Optineurin promoter motif, repeat element or regulatory region #111.
XX
KW Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
KW SNP; glaucoma; progressive ocular hypertensive disorder;
KW glaucoma related disorder; motif; repeat element; regulatory region.
XX
OS Homo sapiens.
XX
PN US2003190617-A1.
XX
PD 09-OCT-2003.
XX
PF 06-MAR-2002; 2002US-00091281.
XX
PR 06-MAR-2002; 2002US-00091281.
XX
PA (SIEE/) SI E.
PA (RAYM/) RAYMOND V.
PA (MORI/) MORISSETTE J.
XX
PI Raymond V, Morissette J, Si E;
XX
DR WPI; 2003-864168/80.
XX
PT New nucleic acid sequences of the optineurin gene are useful to detect
PT polymorphisms particularly single nucleotide polymorphisms in the
PT optineurin promoter to diagnose, prognose and treat glaucoma and related
PT disorders.
XX
PS Claim 11; SEQ ID NO 113; 159pp; English.
XX

```
CC   The invention relates to an isolated nucleic acid (N1) comprising at
CC   least 20 but not more than 1500 consecutive nucleotides of the optineurin
CC   promoter appearing as ADE13890. Also included are the optineurin promoter
CC   operably linked to a heterologous nucleic acid, a nucleic acid capable of
CC   detecting a single nucleotide polymorphism (SNP) in the optineurin
CC   promoter, a host cell comprising the promoter operably linked to a
CC   heterologous sequence, diagnosing or prognosing glaucoma in a sample
CC   obtained from a cell or bodily fluid (comprising detecting a polymorphism
CC   in a promoter region of the optineurin gene, associated with a glaucoma
CC   phenotype), detecting a SNP sequence variation in a sample containing
CC   DNA, detecting the presence of an optineurin promoter sequence variation
CC   in a sample containing DNA, determining the presence or increased
CC   susceptibility to glaucoma or to a progressive ocular hypertensive
CC   disorder resulting in loss of visual field in a patient (or the severity
CC   or progression of glaucoma in a patient, comprising providing
CC   amplification reaction primers that direct amplification of a selected
CC   nucleic acid region containing the variation within the optineurin
CC   promoter and amplifying the DNA) and detecting a polymorphism (comprising
CC   obtaining a sample containing human genomic DNA, providing a nucleic acid
CC   capable of detecting a SNP located within an optineurin promoter, and
CC   detecting the polymorphism). The invention is used to diagnose and
CC   prognose glaucoma and also to treat glaucoma related disorders. The
CC   present sequence is an optineurin promoter motif, repeat element or
CC   putative regulatory region.
XX
SQ   Sequence 15 BP; 11 A; 0 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        830 TCTCTTTTCTTCTCT 844
              | |||||||||| |||
Db         15 TATCTTTTCTTTTCT 1


RESULT 517
ADE52728/c
ID   ADE52728 standard; DNA; 15 BP.
XX
AC   ADE52728;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Oligonucleotide SEQ ID 94.
XX
KW   DNA-binding protein; interferon-activatable protein; ss.
XX
OS   Synthetic.
XX
PN   WO2003089466-A1.
XX
PD   30-OCT-2003.
XX
PF   18-APR-2003; 2003WO-JP004981.
XX
PR   19-APR-2002; 2002JP-00117840.
PR   30-APR-2002; 2002JP-00128418.
PR   30-APR-2002; 2002JP-00128779.
PR   04-DEC-2002; 2002JP-00352469.
XX
PA   (RIKE ) RIKEN KK.
PA   (DNAF-) DNAFORM KK.
PA   (MITU ) MITSUBISHI CHEM CORP.
XX
PI   Hayashizaki Y,  Kamiya M,  Kubodera H;
XX
DR   WPI; 2004-011681/01.
XX
PT   Proteins with DNA binding activity and substances that affect their
PT   activity or expression, useful for treating associated disorders.
XX
PS   Example 9; SEQ ID NO 94; 237pp; Japanese.
XX
CC   The present invention relates to novel proteins (ADE52648-ADE52660,
CC   ADE52670 and ADE52672) and their coding sequences (ADE52635-ADE52647,
CC   ADE52669 and ADE52671). The proteins have a DNA-binding activity or an
CC   interferon-activatable protein (IAP)-like activity. The present
CC   oligonucleotide is related to HSF1 (short), HSF2, dHSF and fungalHSF.
XX
SQ   Sequence 15 BP; 12 A; 0 C; 3 G; 0 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.3e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        830 TCTCTTTTCTTCTCT 844
              | |||||||||| |||
Db         15 TTTCTTTTCTTTTCT 1


RESULT 518
AAT02859
ID   AAT02859 standard; DNA; 16 BP.
XX
AC   AAT02859;
XX
DT   14-MAR-1996  (first entry)
XX
DE   Fungus-derived 18S rRNA encoding DNA PCR amplification primer.
XX
KW   Polymerase chain reaction; primer; ribosomal RNA; amplification;
KW   sequencing; matsutake mushroom; ss.
XX
OS   Agaricus bisporus.
XX
PN   JP07177889-A.
XX
PD   18-JUL-1995.
XX
PF   22-DEC-1993;   93JP-00346106.
XX
PR   22-DEC-1993;   93JP-00346106.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
XX
DR   WPI; 1995-279918/37.
XX
PT   Oligo:nucleotide primer comprising amplification and sequencing portions
PT   - useful for determination of fungal DNA sequences by PCR amplification.
XX
PS   Claim 2; Page 2; 8pp; Japanese.
XX
CC   AAT02855-T02860 are amplification primers for DNA coding for fungus-
CC   derived 18S rRNA. These primers may be bound at the 5' end to the 3' end
CC   of a sequencing primer (AAT02861-T02863). The resulting oligonucleotide
CC   primers comprising amplification and sequencing portions (AAT02864-
CC   T02869). These primers are useful for the determination of the base
CC   sequences of fungi
XX
SQ   Sequence 16 BP; 2 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        789 TCTGGTGCCAAGAGC 803
              |||||||||| |||
Db          2 TCTGGTGCCAGCAGC 16


RESULT 519
AAV45768
ID   AAV45768 standard; DNA; 16 BP.
XX
AC   AAV45768;
```

```
XX
DT   24-DEC-1998  (first entry)
XX
DE   Capture probe 14.
XX
KW   Probe; biosite; target probe; capture domain; microorganic monitoring;
KW   multiple point mutation; genotyping; ss.
XX
OS   Synthetic.
XX
PN   WO9829736-A1.
XX
PD   09-JUL-1998.
XX
PF   31-DEC-1997;   97WO-US024098.
XX
PR   31-DEC-1996;   96US-0034627P.
XX
PA   (GENO-) GENOMETRIX INC.
XX
PI   Eggers MD,  Balch WJ,  Hogan ME,  Mendoza LG;
XX
DR   WPI; 1998-388276/33.
XX
PT   Reaction substrates for multiplexed micro:assay(s) between analyte and
PT   binder - has probes attached to array of sites on surface, useful for,
PT   e.g. diagnosis and drug screening.
XX
PS   Disclosure; Page 35; 100pp; English.
XX
CC   Sequences AAV45755-V45770 are capture probes which are surface bound and
CC   arranged in an array of biosites attached to a solid support. These are
CC   designed to bind rapidly and efficiently to the target probes (AAV45771-
CC   V45786) capture domain. They can be used in the method of the invention
CC   in the following areas: diagnosis, drug screening, analysis of gene
CC   expression, cell sorting and microorganic monitoring, analysis of
CC   multiple point mutations and genotyping
XX
SQ   Sequence 16 BP; 3 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        774 TCTGAGGGCAGCCCC 788
              ||||||||||  || |
Db          2 TCTGAGGGCAACCTC 16


RESULT 520
AAX02894
ID   AAX02894 standard; DNA; 16 BP.
XX
AC   AAX02894;
XX
DT   17-MAY-1999  (first entry)
XX
DE   Human mACHR-6 cDNA antisense inhibitor #5.
XX
KW   mACHR-6; muscarinic acetylcholine receptor 6; disorder; secretion;
KW   acetylcholine responsive cell; phosphatidylinositol turn-over;
KW   smooth muscle cell contraction; nervous system disorder; glandular;
KW   schizo-effective disorder; affective disorder; sleep disorder;
KW   movement disorder; eating disorder; drinking disorder; human; ss.
XX
OS   Homo sapiens.
XX
PN   US5882893-A.
XX
PD   16-MAR-1999.
XX
PF   04-DEC-1997;   97US-00985090.
XX
PR   04-DEC-1997;   97US-00985090.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Goodearl AD;
XX
DR   WPI; 1999-214063/18.
XX
PT   Nucleic acids encoding muscarinic acetylcholine receptor 6 - useful for
PT   modulating the effects of acetylcholine on acetylcholine responsive
PT   cells.
XX
PS   Disclosure; Col 85-86; 59pp; English.
XX
CC   This invention describes the isolation of a novel human muscarinic
CC   acetylcholine receptor 6 (mACHR-6), capable of modulating the effects of
CC   acetylcholine on acetylcholine responsive cells. mACHR-6 cDNAs and
CC   polypeptides may be used to detect naturally occurring mutations of the
CC   mACHR-6 gene and determine if a subject with the mutated gene is at risk
CC   of (or is predisposed to have) a mACHR-6 related disorder, modulate cell
CC   activity mediated by mACHR-6 (e.g. biological processes mediated by
CC   phosphatidylinositol turn-over and signalling), secretion of a molecule
CC   (e.g. a neurotransmitter or a glandular enzyme), or contraction of a
CC   smooth muscle cell, treat disorders mediated by abnormal mACHR-6 activity
CC   e.g nervous system disorders (e.g. amnesia, apraxia, agnosia, amnestic
CC   dysnomia, amnestic spatial disorientation, Kluver-Bucy syndrome,
CC   Alzheimer's related memory loss and learning disability, visual
CC   hallucinations, perceptual disturbances, and Lewry body dementia
CC   associated delirium), schizo-effective disorders (e.g schizophrenia with
CC   mood swings, and depressive illness), affective disorders, sleep
CC   disorders (e.g. REM sleep abnormalities, paradoxical sleep abnormalities,
CC   sleep-wakefulness, and body temperature or respiratory depression
CC   abnormalities during sleep), pain generating mechanism disorders (e.g.
CC   related to irritable bowel syndrome (IBS), or chest pain), movement
CC   disorders (e.g. related to Parkinson's disease), eating disorders (e.g.
CC   insulin hypersecretion related obesity), drinking disorders (e.g.
CC   diabetic polydipsia), smooth muscle related disorders (e.g. IBS,
CC   diverticular disease, urinary incontinence, oesophageal achalasia, and
CC   chronic obstructive airways disease), cardiac disorders (e.g pathologic
CC   bradycardia or tachycardia, arrhythmia, flutter and fibrillation), and
CC   glandular disorders (e.g. xerostomia and diabetes mellitus)
XX
SQ   Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCT 789
              ||||||  ||| ||||
Db          1 CTGAGGCCAGGCCCT 15


RESULT 521
AAX59175
ID   AAX59175 standard; DNA; 16 BP.
XX
AC   AAX59175;
XX
DT   06-SEP-1999  (first entry)
XX
DE   Human flh84g5 3' untranslated region antisense oligonucleotide.
XX
KW   G protein coupled receptor; flh84g5; human; diagnosis; screening;
KW   therapy; antiparkinsonian; nootropic; neuroprotective; neuroleptic;
KW   antidepressant; antiarrythmic; antidiabetic; antiinflammatory;
KW   phosphatidylinositol; antisense; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9928470-A1.
XX
```

```
PD   10-JUN-1999.
XX
PF   04-DEC-1998;   98WO-US025832.
XX
PR   04-DEC-1997;   97US-00985090.
PR   17-MAR-1998;   98US-00042780.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Goodearl ADJ,  Glucksmann MA,  Xie M,  Distefano P;
XX
DR   WPI; 1999-394858/33.
XX
PT   New nucleic acid encoding an isolated G-protein coupled receptor useful
PT   for treating nervous system related disorders.
XX
PS   Disclosure; Page 64; 140pp; English.
XX
CC   This oligonucleotide is complementary to a portion of the 3' untranslated
CC   region of the human G protein coupled receptor flh84g5 gene corresponding
CC   to nucleotides 2133-2148 of the sequence given in AAX59167. It can be
CC   used to modulate flh84g5 activity, and hence to treat a disease or
CC   disorder characterized by, or associated with, aberrant or abnormal
CC   flh84g5 nucleic acid expression and/or flh84g5 polypeptide activity by
CC   inhibiting flh84g6 nucleic acid expression. Diseases and disorders
CC   associated with aberrant or abnormal flh84g5 activity include nervous
CC   system related disorders, e.g. amnesia, apraxia, agnosia, amnestic
CC   dysnomia, amnestic spatial disorientation, Kluver-Bucy syndrome,
CC   Alzheimer's related memory loss and learning disability; disorders
CC   affecting consciousness such as visual hallucinations, perceptual
CC   disturbances or delerium associated with Lewy body dementia, schitzo-
CC   effective disorders, schizophrenia with mood swings, depressive illness
CC   (primary and secondary); affective disorders such as REM sleep
CC   abnormalities in patients suffering from e.g. depression, paradoxical
CC   sleep abnormalities, sleep-wakefulness, and body temperature or
CC   respiratory depression abnormalities during sleep; disorders affecting
CC   pain generation mechanisms e.g. pain related to irritable bowel syndrome
CC   or chest pain; movement disorders e.g. Parkinson's disease related
CC   movement disorders; eating disorders e.g. insulin hypersecretion related
CC   obesity or drinking disorders, e.g. diabetic polydipsia; smooth muscle
CC   related disorders, e.g. irritable bowel syndrome, diverticular disease,
CC   urinary incontinence, oesophageal achalasia or chronic obstructive
CC   airways disease; cardiac muscle disorders, e.g. pathologic bradycardia or
CC   tachycardia, arrhythmia, flutter or fibrillation; and gland related
CC   disorder such as xerostomia or diabetes mellitus
XX
SQ   Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCT 789
              ||||||  |||  ||||
Db          1 CTGAGGCCAGGCCCT 15


RESULT 522
AAH44581
ID   AAH44581 standard; DNA; 16 BP.
XX
AC   AAH44581;
XX
DT   20-MAR-2003  (revised)
DT   01-NOV-2001  (first entry)
XX
DE   Rat mACHR-6 antisense oligonucleotide SEQ ID NO:26.
XX
KW   Rat; muscarinic acetylcholine receptor 6; mACHR-6; detection;
KW   antiparkinsonian; nootropic; neuroprotective; neuroleptic; antidiabetic;
KW   antidepressant; antiarrhythmic; antiinflammatory; carnitine; pain;
KW   G-protein coupled receptor; nervous system related disorder; xerostomia;
KW   disorders affecting consciousness; affective disorder; movement disorder;
KW   irritable bowel syndrome; drinking disorder; gland related disorder;
KW   smooth muscle related disorder; cardiac muscle disorder; eating disorder;
KW   diabetes mellitus; diagnosis; drug screening; antisense; ss.
XX
OS   Rattus sp.
XX
PN   US6093545-A.
XX
PD   25-JUL-2000.
XX
PF   02-OCT-1998;   98US-00165543.
XX
PR   04-DEC-1997;   97US-00985090.
PR   17-MAR-1998;   98US-00042780.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Glucksmann MA,  Goodearl ADJ;
XX
DR   WPI; 1999-394858/33.
XX
PT   New nucleic acid encoding an isolated G-protein coupled receptor useful
PT   for treating nervous system related disorders.
XX
PS   Disclosure; Col 49; 64pp; English.
XX
CC   The present invention describes muscarinic acetylcholine receptor 6
CC   (mACHR-6), which is a member of the G family of proteins. mACHR-6 has
CC   antiparkinsonian, nootropic, neuroprotective. neuroleptic, antidiabetic
CC   antidepressant, antiarrhythmic and antiinflammatory activities. The mACHR
CC   -6 protein, is capable of modulating the effects of a G-protein coupled
CC   receptor (GPCR) ligand such as acetylcholine or an acetylcholine like
CC   molecule such as carnitine, e.g. by modulating phospholipase C
CC   signalling/activity. Products from the present invention can be used for
CC   treating disorders mediated by abnormal mACHR-6 protein activity such as
CC   nervous system related disorders, disorders affecting consciousness,
CC   affective disorders such as REM sleep abnormalities, disorders affecting
CC   pain generation mechanisms such as pain related to irritable bowel
CC   syndrome or chest pain, movement disorders, eating disorders, drinking
CC   disorders, smooth muscle related disorders, cardiac muscle disorders, and
CC   gland related disorders such as xerostomia or diabetes mellitus. The
CC   products can also be used for detection, diagnosis and drug screening.
CC   The present sequence represents a rat mACHR-6 antisense oligonucleotide
CC   which is given in the exemplification of the present invention. (Updated
CC   on 20-MAR-2003 to correct DR field.)
XX
SQ   Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCT 789
              ||||||  |||  ||||
Db          1 CTGAGGCCAGGCCCT 15


RESULT 523
AAA67030
ID   AAA67030 standard; DNA; 16 BP.
XX
AC   AAA67030;
XX
DT   19-OCT-2000  (first entry)
XX
DE   Human leukocyte antigen PCR primer BASF-1 SEQ ID NO:88.
XX
KW   Human leukocyte antigen; HLA; class I allele type; probe; PCR primer;
KW   amplification; hybridisation; organ transplant; gene typing; diagnosis;
KW   ss.
XX
OS   Homo sapiens.
XX
```

PN WO200031295-A1.
XX
PD 02-JUN-2000.
XX
PF 07-OCT-1999; 99WO-JP005527.
XX
PR 26-NOV-1998; 98JP-00335151.
XX
PA (SHIO) SHIONOGI & CO LTD.
XX
PI Moribe T, Kaneshige T;
XX
DR WPI; 2000-400097/34.
XX
PT Simple, rapid and accurate method for distinguishing HLA class I allele
PT type with possibility of mechanization and automation, applicable in
PT judging donor-recipient compatibility during organ transplant and disease
PT diagnosis.
XX
PS Claim 9; Page 70; 83pp; Japanese.
XX
CC The present invention describes a method for distinguishing a human
CC leukocyte antigen (HLA) class I antigen or allele by a combination of
CC polymerase chain reaction (PCR) using a primer pair whereby all HLA-A, -B
CC or -C alleles can be amplified or using reverse hybridisation analysis
CC comprising a DNA probe covalently bonded to microtitre plate wells which
CC are hybridisable specifically with the base sequence of at least one
CC specific HLA-A, -B or -C allele. The method is applicable in gene typing,
CC judging donor-recipient compatibility during organ transplant and
CC correlation analysis for diagnosis of various diseases. The method is
CC simple, rapid and accurate, with possibility of mechanisation and
CC automation, without the problems encountered by using the prior-art
CC techniques. AAA66943 to AAA67072 represent oligonucleotide probes and PCR
CC primers for use in the method of the present invention
XX
SQ Sequence 16 BP; 4 A; 5 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 705 CAGCGAGTCCCAGGA 719
| ||||||||| ||||
Db 1 CCGCGAGTCCGAGGA 15

RESULT 524
AAC63247/c
ID AAC63247 standard; DNA; 16 BP.
XX
AC AAC63247;
XX
DT 06-FEB-2001 (first entry)
XX
DE Oligonucleotide #20 used in a method for primer selection.
XX
KW PCR primer; nucleic acid amplification; melting temperature; T_m; ss.
XX
OS Homo sapiens.
XX
PN WO200060123-A2.
XX
PD 12-OCT-2000.
XX
PF 05-APR-2000; 2000WO-US008962.
XX
PR 06-APR-1999; 99US-0127891P.
XX
PA (GENO-) GENOME TECHNOLOGIES LLC.
XX
PI Senapathy P;
XX
DR WPI; 2000-656235/63.
XX
PT Determining Tm range for several degenerate primers with a fixed-sequence
PT and a degenerate-sequence portion for use in polymerase chain reaction
PT amplification by identifying a specific sequence in the nucleic acid
PT template.
XX
PS Disclosure; Fig 3A; 34pp; English.
XX
CC The present invention relates to a method for selecting PCR primers for
CC nucleic acid amplification. The method comprises determining the melting
CC temperature (T_m) range for degenerate oligonucleotide primers with a
CC fixed-sequence portion (FS) and a degenerate-sequence portion (DS) by
CC searching known portion of a nucleic acid template for a sequence
CC complementary to a desired FS of a primer. Nucleotide base pairs flanking
CC or interspersed between the sequence complementary to a DS of one of the
CC primers are detected and T_m is calculated. The method of the present
CC invention allows primers which produce more efficient DNA amplification
CC to be produced. The present sequence is a primer used in the method of
CC the present invention
XX
SQ Sequence 16 BP; 1 A; 6 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 677 CGGACCCCCAGGGCC 691
||| |||| ||||||
Db 16 CGGCCCCCGAGGGCC 2

RESULT 525
AAF57677/c
ID AAF57677 standard; DNA; 16 BP.
XX
AC AAF57677;
XX
DT 29-JUN-2001 (first entry)
XX
DE Rat sodium channel beta-1A subunit cDNA amplifying reverse primer.
XX
KW Sodium channel; modulator; sodium channel beta-1A subunit; pain; rat;
KW analgesic; neuroprotective; RT-PCR; primer; ss.
XX
OS Rattus sp.
XX
PN WO200123570-A2.
XX
PD 05-APR-2001.
XX
PF 29-SEP-2000; 2000WO-US027034.
XX
PR 30-SEP-1999; 99US-0156837P.
XX
PA (ORTH) ORTHO-MCNEIL PHARM INC.
XX
PI D'andrea M, Rogers KE;
XX
DR WPI; 2001-281683/29.
XX
PT Screening for sodium channel activity modulators, used to decrease
PT neuropathic pain, comprises contacting a candidate compound with a cell
PT expressing the channel.
XX
PS Example 1; Page 78; 124pp; English.
XX
CC The invention relates to a method of screening for a modulator of sodium
CC channel activity that comprises contacting a candidate modulator with a
CC cell co-expressing a sodium channel beta-1A subunit with a sodium channel
CC alpha subunit, and determining the effect of the candidate modulator on
CC the sodium channel function in the cell. The method is useful for
CC identifying sodium channel activity modulators, preferably causing
CC decreased beta 1A subunit expression. The modulators can be used to

```
CC   decrease neuropathic pain, and to decrease the number of febrile seizures
CC   in an individual. The present sequence represents a reverse primer
CC   beta1A5 used in RT-PCR amplification of the DNA encoding a rat sodium
CC   channel beta-1A subunit
XX
SQ   Sequence 16 BP; 7 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        820 GTTGGCTGTGTCTCT 834
              | | ||||||||||||
Db         16 GCTTGCTGTGTCTCT 2


RESULT 526
AAS56938/c
ID   AAS56938 standard; DNA; 16 BP.
XX
AC   AAS56938;
XX
DT   16-JAN-2002  (first entry)
XX
DE   Validation ribozyme DNA sequence #112.
XX
KW   Human; BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe;
KW   cytostatic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AF6; BR2;
KW   inhibitor dominant negative 4; breast basic conserved protein 1; BBC1;
KW   BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200170982-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US009559.
XX
PR   23-MAR-2000; 2000US-00536058.
XX
PA   (IMMU-) IMMUSOL INC.
PA   (BEGE/) BEGER C.
XX
PI   Beger C,  Barber J,  Wong-Staal F;
XX
DR   WPI; 2001-611503/70.
XX
PT   Novel polypeptides that are the regulators of BRCA-1, useful for treating
PT   cancer and diagnosing the presence of neoplastic cells in biological
PT   sample.
XX
PS   Disclosure; Fig 8; 97pp; English.
XX
CC   Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators,
CC   ribozyme target recognition RNA sequences, DNA fragments encoding the RNA
CC   and primers used in the methods of the invention. Hybridisation of
CC   ribozymes to their targets results in cleavage of the RNA target. The
CC   ribozymes can be used to cleave regulators of the tumour suppressor BRCA-
CC   1, resulting in upregulation or downregulation of BRCA-1 in a cell. The
CC   mRNA targets include those encoding the BRCA-1 regulator BR1, inhibitor
CC   dominant negative 4 (ID4), breast basic conserved protein 1 (BBC1),
CC   CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and
CC   diagnosing cancer and other proliferative disorders. The severity of an
CC   incidence of cancer can be lessened by regulating tumour proliferation
CC   through modulation of BRCA-1 expression. The sequences of the invention
CC   are useful in the development of anti-cancer drugs
XX
SQ   Sequence 16 BP; 3 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        565 TCCTCCCAGACCAAG 579
              |||| |||||||| |
Db         16 TCCTTCCAGACCACG 2


RESULT 527
AAF30671/c
ID   AAF30671 standard; DNA; 16 BP.
XX
AC   AAF30671;
XX
DT   11-JUN-2001  (first entry)
XX
DE   Sodium channel beta1A subunit PCR primer beta1A5.
XX
KW   Sodium channel beta1A; rat; splice variant; analgesic; cardiant; pain;
KW   seizure; therapy; PCR primer; ss.
XX
OS   Rattus sp.
XX
PN   WO200123571-A1.
XX
PD   05-APR-2001.
XX
PF   29-SEP-2000; 2000WO-US027119.
XX
PR   30-SEP-1999;   99US-0156837P.
XX
PA   (UNMI ) UNIV MICHIGAN.
PA   (ORTH ) ORTHO-MCNEIL PHARM INC.
XX
PI   Isom LL,  Kazen-Gillespie K,  Rogers KE;
XX
DR   WPI; 2001-258136/26.
XX
PT   An isolated nucleic acid encoding a sodium channel beta1A subunit
PT   polypeptide, useful for identifying modulators of sodium channel beta1A
PT   subunits and treating neuropathic pain.
XX
PS   Example 1; Page 79; 121pp; English.
XX
CC   The present sequence is that of PCR primer beta1A5. The primer is based
CC   on a sequence unique to rat sodium channel beta1A subunit. It was used
CC   with primer beta1A3 (see AAF30670) to confirm that a beta1A transcript
CC   identified by library screening was expressed by rat adrenal gland. The 2
CC   primers amplify a region of beta1A from the N-terminus past the region in
CC   which the amino acid sequence changed from identity to non-identity to
CC   beta1, or the putative splice site, by RT-PCR using rat adrenal gland
CC   total RNA as template. Novel rat sodium channel beta1A subunit (see
CC   AAB20371) is a splice variant of sodium channel beta1, resulting from
CC   retention of intron 3 containing an in-frame stop codon. This alternative
CC   splicing event produces a novel C-terminus. Methods and compositions for
CC   using beta1A nucleic acids and proteins are described. A claimed method
CC   of screening for a modulator of sodium channel activity utilises a cell
CC   co-expressing a sodium channel beta1A subunit and a sodium channel alpha
CC   subunit. A claimed method for decreasing neuropathic pain, and a claimed
CC   method for decreasing the number of fibrillar seizures in an individual,
CC   both involve administering a modulator of the sodium channel beta1A
CC   subunit
XX
SQ   Sequence 16 BP; 7 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        820 GTTGGCTGTGTCTCT 834
              | | ||||||||||||
Db         16 GCTTGCTGTGTCTCT 2


RESULT 528
```

ACF63301/c
ID ACF63301 standard; DNA; 16 BP.
XX
AC ACF63301;
XX
DT 09-OCT-2003 (first entry)
XX
DE Human histamine receptor 1 antisense oligonucleotide SEQ ID NO:23.
XX
KW Human; pharmacological; hypotensive; antilipaemic; vasotropic; laxative;
KW dermatological; antidepressant; tranquilliser; antiinflammatory; eczema;
KW antiulcer; antimigraine; neuroprotective; antiparkinsonian; analgesic;
KW gynaecological; virucide; vulnerary; antiarthritic; antipsoriatic; cold;
KW antimicrobial; cytostatic; litholytic; pathological disorder; depression;
KW abnormal appetite; hypertension; hypercholesterolaemia; hyperlipidaemia;
KW erectile dysfunction; anxiety; stress; inflammatory bowel syndrome;
KW ulcerative colitis; Crohn's disease; renal stone; gall stone; migraine;
KW constipation; headache; seizure; multiple sclerosis; polymyositis;
KW fibromyalgia; Parkinson's disease; amyotrophic lateral sclerosis; trauma;
KW chronic pain; pre-menstrual syndrome; sinusitis; carpal tunnel syndrome;
KW chronic fatigue syndrome; rosacea; arthritis; psoriasis; prostatis;
KW inflammation; heart burn; infection; colon cancer; malignant melanoma;
KW skin disorder; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO2003006478-A1.
XX
PD 23-JAN-2003.
XX
PF 10-JUL-2002; 2002WO-US021664.
XX
PR 10-JUL-2001; 2001US-0303820P.
XX
PA (OLIG-) OLIGOS ETC INC.
XX
PI Dale RMK, Arrow A, Thompson T;
XX
DR WPI; 2003-221709/21.
XX
PT Composition with a modified oligonucleotide useful for treating a patient
PT with a pathological disorder such as abnormal appetite, hypertension,
PT eczema, anxiety, stress, and cancer.
XX
PS Claim 17; Page 8; 173pp; English.
XX
CC The present invention describes a composition (I) suitable for
CC administration in a mammal, which comprises a modified oligonucleotide
CC (II) of 7-75 nucleotides containing 7 or more contiguous ribose groups
CC linked by achiral 5'-3' internucleoside phosphate linkages, where the
CC modified oligonucleotide is complementary to a region of a gene
CC associated with a pathological disorder. Also described: (1) a
CC nutritional supplement comprising (II); and (2) a cosmetic composition
CC comprising (II), where the modified oligonucleotide is complementary to a
CC region of a gene associated with a skin disorder. (I) and (II) can have
CC hypotensive, antilipaemic, vasotropic, dermatological, antidepressant,
CC tranquilliser, antiinflammatory, antiulcer, laxative, antimigraine,
CC neuroprotective, antiparkinsonian, analgesic, gynaecological, virucide,
CC vulnerary, antiarthritic, antipsoriatic, antimicrobial, cytostatic and
CC litholytic activities. (I) can be used for treating a patient with a
CC pathological disorder selected from abnormal appetite, hypertension,
CC hypercholesterolaemia, hyperlipidaemia, erectile dysfunction, eczema,
CC depression, anxiety, stress, inflammatory bowel syndrome, ulcerative
CC colitis, Crohn's disease, renal stones, gall stones, constipation, colds,
CC migraine headache, seizure, multiple sclerosis, polymyositis, sinusitis,
CC fibromyalgia, Parkinson's disease, amyotrophic lateral sclerosis (ALS),
CC chronic pain, pre-menstrual syndrome, trauma, carpal tunnel syndrome,
CC chronic fatigue syndrome, rosacea, arthritis, psoriasis, prostatis,
CC inflammation, heart burn, infection, poison ivy, colon cancer, malignant
CC melanoma, and malignant nasal polyps. The nutritional supplement is
CC useful for supplementing the diet of an individual, and the cosmetic
CC composition is useful for improving the appearance of the skin in an
CC individual with a skin disorder. ACF63279 to ACF63410 represent
CC nucleotide sequence given in the exemplification of the present invention
XX
SQ Sequence 16 BP; 4 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 627 TCCTGAGAGAGGCTC 641
|||| || |||||||
Db 16 TCCTAAGGGAGGCTC 2

RESULT 529
ABT33693/c
ID ABT33693 standard; DNA; 16 BP.
XX
AC ABT33693;
XX
DT 29-MAY-2003 (first entry)
XX
DE Ribozyme substrate binding sequence SEQ ID No 44.
XX
KW Cytostatic; gene therapy; apoptosis; cancer growth inhibition;
KW drug screening; ss.
XX
OS Unidentified.
XX
PN WO200292840-A2.
XX
PD 21-NOV-2002.
XX
PF 14-MAY-2002; 2002WO-US015198.
XX
PR 14-MAY-2001; 2001US-0290927P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Keily B, Habita C, Robbins J, Barber J;
XX
DR WPI; 2003-129308/12.
XX
PT New isolated nucleic acid molecule useful for regulating apoptosis
PT induction in cells, for inhibiting the growth of cancer in subjects, and
PT for drug screening.
XX
PS Example 3; Page 40; 153pp; English.
XX
CC The invention relates to a novel isolated molecule comprising bases 2-8
CC or 13-16 of 2 16 base pair sequences, or comprising a 1731 base pair
CC sequence, all given in the specification or at least 95 % identity with
CC the 1731 bp sequence. The nucleic acid molecule is useful in regulating
CC apoptosis in cells and in drug screening. The method is useful in
CC facilitating the induction of apoptosis in cells, in identifying an agent
CC that can facilitate the induction of apoptosis in cells, and in
CC inhibiting the growth of a cancer. This polynucleotide sequence
CC represents a ribozyme binding substrate sequence relating to the
CC invention
XX
SQ Sequence 16 BP; 9 A; 4 C; 2 G; 0 T; 0 U; 1 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 583 TTTGTTCTGTTTTTC 597
||||||||| | |||
Db 16 TTTGTTCTGGTGTTC 2

RESULT 530
ABX11859

```
ID   ABX11859 standard; DNA; 16 BP.
XX
AC   ABX11859;
XX
DT   10-MAY-2003  (first entry)
XX
DE   Human muscarinic acetylcholine receptor 6 antisense oligonucleotide #6.
XX
KW   Human; ss; mACHR-6; muscarinic acetylcholine receptor-6;
KW   cognitive disorder; amnesia; amnestic spatial disorientation;
KW   Kluver-Bucy syndrome; Alzheimer's related memory loss; antisense;
KW   learning disability; consciousness disorder; visual hallucination;
KW   delirium; schizo-effective disorder; schizophrenia; depression;
KW   affective disorder; sleep disorders; pain generation disorder;
KW   irritable bowel syndrome; chest pain; movement disorder;
KW   Parkinson's disease; eating disorder; insulin hypersecretion obesity;
KW   heart muscle disorder; bradycardia; tachycardia; arrhythmia; flutter;
KW   fibrillation; gland related disorder; xerostomia; diabetes mellitus.
XX
OS   Homo sapiens.
XX
PN   US2002166131-A1.
XX
PD   07-NOV-2002.
XX
PF   08-JUL-1999;   99US-00349755.
XX
PR   04-DEC-1997;   97US-00985090.
PR   17-MAR-1998;   98US-00042780.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Goodearl ADJ, Glucksmann MA;
XX
DR   WPI; 2003-298709/29.
XX
PT   New muscarinic acetylcholine receptor 6 (mACHR-6) nucleic acids and
PT   proteins, useful for modulating acetylcholine or phosphatidylinositol,
PT   particularly for treating e.g. schizophrenia, chest pain, tachycardia or
PT   arrhythmia.
XX
PS   Disclosure; Page 26; 66pp; English.
XX
CC   The invention relates to an isolated human or rat muscarinic
CC   acetylcholine receptor 6 (mACHR-6) nucleic acid molecule and the encoded
CC   protein. Also included are (non-human) host cells comprising the mACHR-6
CC   nucleic acid molecule, an antibody that selectively bind the polypeptide
CC   above, a method for producing the polypeptide by culturing the host cell
CC   such that the mACHR-6 nucleic acid is expressed, a method for detecting
CC   the presence of the mACHR-6 polypeptide and nucleic acid, a method for
CC   identifying a compound that binds to the mACHR-6 polypeptide and a method
CC   for modulating the activity of the mACHR-6 polypeptide. The mACHR-6
CC   polynucleotide, polypeptide, antibody or modulator are useful in drug
CC   screening assays, diagnostic assays for identifying diseases, allelic
CC   screening, pharmacogenetic testing, methods of treatment,
CC   pharmacogenomics or monitoring the effects during clinical trials. In
CC   particular, the mACHR-6 polynucleotide, polypeptide or antibody is useful
CC   for treating or diagnosing cognitive disorders (e.g. amnesia, amnestic
CC   spatial disorientation, Kluver-Bucy syndrome, Alzheimer's related memory
CC   loss or learning disability), disorders affecting consciousness (e.g.
CC   visual hallucinations or delirium), schizo-effective disorders (e.g.
CC   schizophrenia or depression), affective disorders (e.g. sleep disorders),
CC   disorders affecting pain generation mechanisms (e.g. pain related to
CC   irritable bowel syndrome, or chest pain), movement disorders (e.g.
CC   Parkinson's disease), eating disorders (e.g. insulin hypersecretion
CC   obesity), heart muscle related disorders (e.g. bradycardia, tachycardia,
CC   arrhythmia, flutter or fibrillation), or gland related disorder (e.g.
CC   xerostomia or diabetes mellitus). The present sequence is an antisense
CC   oligonucleotide targetting human mACHR-6
XX
SQ   Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        775 CTGAGGGCAGCCCCT 789
              ||||||  |||  ||||
Db          1 CTGAGGCCAGGCCCT 15


RESULT 531
ACD82376
ID   ACD82376 standard; DNA; 16 BP.
XX
AC   ACD82376;
XX
DT   19-SEP-2003  (first entry)
XX
DE   Nucleic acid cloning associated adaptor molecule #77.
XX
KW   Adaptor molecule; nucleic acid cloning; nucleic acid ligating;
KW   internal deletion mutagenesis analysis; cloning vehicle; ss.
XX
OS   Synthetic.
XX
PN   US2003044791-A1.
XX
PD   06-MAR-2003.
XX
PF   13-JUN-2001; 2001US-00880313.
XX
PR   13-JUN-2001; 2001US-00880313.
XX
PA   (FLEM/) FLEMINGTON E K.
XX
PI   Flemington EK;
XX
DR   WPI; 2003-521745/49.
XX
PT   New adaptor molecules, useful for cloning nucleic acid molecules that
PT   does not require the design and synthesis of oligonucleotides or PCR
PT   primers.
XX
PS   Claim 12; Fig 2; 100pp; English.
XX
CC   The invention describes adaptor molecules, where each end of the adaptor
CC   is compatible with a nucleic acid digested with a restriction enzyme or a
CC   nucleic acid comprising an end that is compatible with a nucleic acid
CC   digested with a restriction enzyme. The adaptor molecules, compositions,
CC   kits and arrays are useful for cloning nucleic acid molecules that does
CC   not require the design and synthesis of oligonucleotides or PCR primers.
CC   The adaptors, kits and arrays are also useful for ligating two ends of a
CC   single nucleic acid molecule, or ligating two or more nucleic acid
CC   molecules. The kits can also be used for performing internal deletion
CC   mutagenesis analysis. The adaptor molecules are ligated to a cloning
CC   vehicle, making the cloning procedure more rapid and efficient, and less
CC   error-prone. This sequence represents a nucleic acid cloning associated
CC   adaptor molecule
XX
SQ   Sequence 16 BP; 3 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        696 TGTACCCTCCAGCGA 710
              ||  |||||  ||||||
Db          1 TGCACCCTGCAGCGA 15


RESULT 532
ADC22143
ID   ADC22143 standard; DNA; 16 BP.
XX
AC   ADC22143;
```

XX
DT 18-DEC-2003 (first entry)
XX
DE Group II intron design and selection related DNA #19.
XX
KW group II intron; modified EBS1 sequence; modified EBS2 sequence;
KW modified delta sequence; transcription regulation; nucleotide integrase;
KW plasmid library; DNA target recognition site; L1.LtrB intron;
KW group II intron design; group II intron selection; ds.
XX
OS Synthetic.
XX
PN US2003104352-A1.
XX
PD 05-JUN-2003.
XX
PF 22-OCT-2002; 2002US-00277643.
XX
PR 13-OCT-2000; 2000US-00687944.
XX
PA (LAMB/) LAMBOWITZ A M.
PA (GUOH/) GUO H.
PA (KARB/) KARBERG M.
XX
PI Lambowitz AM, Guo H, Karberg M;
XX
DR WPI; 2003-755219/71.
XX
PT New nucleic acid construct, useful for analyzing the catalytic activity
PT and integrative activity of a modified nucleotide integrase.
XX
PS Example 3; Fig 4; 48pp; English.
XX
CC The invention describes a nucleic acid construct comprising: (a) a
CC modified group II intron sequence comprising a sequence consisting of a
CC modified EBS1 sequence, a modified EBS2 sequence, a modified delta
CC sequence or a partially deleted loop sequence in domain IV; or (b) a
CC promoter for regulating transcription of the modified group II intron
CC sequences, the promoter being operably linked to the modified group II
CC intron sequence. The nucleic acid construct is useful for analysing the
CC catalytic activity and integrative activity of a modified nucleotide
CC integrase. This sequence represents an DNA sequence used in the design
CC and selection on group II introns capable of inserting into specific DNA
CC target sites.
XX
SQ Sequence 16 BP; 3 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 3.0%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 550 GCCTCCCCAGCGAGC 564
|| ||||| |||||||
Db 1 GGCTCCCGAGCGAGC 15

RESULT 533
AAI67333
ID AAI67333 standard; DNA; 15 BP.
XX
AC AAI67333;
XX
DT 11-FEB-2002 (first entry)
XX
DE Human FKBP8 allele-specific oligonucleotide (ASO) primer.
XX
KW FK506-binding protein 8; FKBP8; haplotyping; polymorphism; cancer; ss;
KW immunosuppression; human; allele-specific oligonucleotide; ASO; primer.
XX
OS Homo sapiens.
XX
PN WO200172965-A2.
XX
PD 04-OCT-2001.
XX
PF 26-MAR-2001; 2001WO-US009718.
XX
PR 24-MAR-2000; 2000US-0192125P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Anastasio AE, Bentivegna SC, Choi JY, Kliem SE, Koshy B;
PI Stephens JC;
XX
DR WPI; 2001-626261/72.
XX
PT New haplotypes of the FK506-binding protein 8 gene, useful for genotyping
PT that gene in individual and to design new therapy for associated disease
PT such as immunosuppression and cancer.
XX
PS Claim 15; Page 76; 98pp; English.
XX
CC The invention relates to haplotyping the FK506-binding protein 8 (38kD)
CC (FKBP8) gene in an individual. The method involves determining the
CC identity of the nucleotide pair at one or more polymorphic sites selected
CC from P1 to P26 (described in the specification). The invention is useful
CC to improve the efficiency and reliability of several steps in the
CC discovery and development of drugs for treating diseases associated with
CC FKBP8 activity, for example immunosuppression and cancer. Sequences
CC AAI67300-351 represent allele-specific oligonucleotide (ASO) primers for
CC detecting FKBP8 gene polymorphisms. Note: some of these sequences
CC (alternate sequence Id numbering- 31, 33, 35. .81) differ from those with
CC the same seq Id No.s indicated in the disclosure
XX
SQ Sequence 15 BP; 5 A; 5 C; 2 G; 2 T; 0 U; 1 Other;

Query Match 2.9%; Score 11.6; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 568 TCCCAGACCAAG 579
|||||||||:|
Db 4 TCCCAGACCARG 15

RESULT 534
ABS64891/c
ID ABS64891 standard; DNA; 15 BP.
XX
AC ABS64891;
XX
DT 15-NOV-2002 (first entry)
XX
DE ASO primer, #8, for detecting CYP27B1 gene polymorphisms.
XX
KW Human; primer; ss; cytochrome P450; subfamily XXVIIB;
KW 25-hydroxyvitamin D-1-alpha-hydroxylase; CYP27B1; isogene; hydroxylation;
KW 25-hydroxyvitamin D3; 25(OH)D3; calcitriol; 1alpha,25(OH)2D3; kidney;
KW nuclear receptor; vitamin D; VDR; calcium homeostasis;
KW cellular differentiation; SNP; single nucleotide polymorphism;
KW pseudovitamin D-dependent rickets type I; haplotyping; genotyping;
KW antibody; antisense; cancer; diabetes; inflammatory disorder;
KW chromosome 12q13.3-q14; antiinflammatory; ASO;
KW allele specific oligonucleotide.
XX
OS Homo sapiens.
XX
PN WO200262820-A2.
XX
PD 15-AUG-2002.
XX
PF 05-NOV-2001; 2001WO-US047438.
XX
PR 03-NOV-2000; 2000US-0245797P.
XX
PA (GENA-) GENAISSANCE PHARM INC.

XX
PI Bieglecki KM, Monroe G, Kazemi A, Shah N;
XX
DR WPI; 2002-643397/69.
XX
PT New genetic variants of the human polypeptide 1 (CYP27B1) gene, useful
PT for treating disorders associated with aberrant expression or
PT overproduction of TNF e.g. cancer, diabetes or inflammatory disorders.
XX
PS Claim 14; Page 14; 64pp; English.
XX
CC The invention discloses an isolated polymorphic polynucleotide comprising
CC a coding sequence for a cytochrome P450, subfamily XXVIIB (25-
CC hydroxyvitamin D-1-alpha-hydroxylase) or CYP27B1 isogene. CYP27B1
CC catalyses the hydroxylation of 25-hydroxyvitamin D3 [25(OH)D3] to
CC calcitriol (1alpha,25(OH)2D3) in the proximal tubule of the kidney. The
CC binding of calcitriol to the nuclear receptor for the hormonally active
CC form of vitamin D (VDR) activates the receptor with subsequent regulation
CC of physiological events such as calcium homeostasis and cellular
CC differentiation. The various polymorphisms in the CYP27B1 gene may cause
CC pseudovitamin D-dependent rickets type I. The polynucleotide is useful
CC for haplotyping, genotyping, predicting a haplotype pair, identifying an
CC association between a trait and at least one haplotype or haplotype pair
CC and for designing an isolated nucleotide for detecting a polymorphism in
CC the CYP27B1 gene. The polypeptide is useful for raising antibodies
CC specific for, and immunoreactive with, the isolated polypeptide and for
CC screening for drugs or other chemical compounds that bind to, or are
CC enzymatic substrates for, the isolated polypeptide. The pharmaceutical
CC composition, comprising the isolated polynucleotide, an antisense
CC oligonucleotide directed against one of the novel CYP27B1 isogenes, a
CC polynucleotide encoding the antisense oligonucleotide or another compound
CC that inhibits expression of the CYP27B1 isogene, is useful for treating
CC disorders affected by expression or function of the CYP27B1 isogene e.g.
CC cancer, diabetes or inflammatory disorders. The sequences presented in
CC ABS64884-ABS64897 are the allele specific oligonucleotide (ASO) primers
CC which were used for detecting CYP27B1 gene polymorphisms. The CYP27B1
CC gene is located on chromosome 12q13.3-q14
XX
SQ Sequence 15 BP; 3 A; 4 C; 6 G; 1 T; 0 U; 1 Other;

Query Match 2.9%; Score 11.6; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 856 CCTGGCTCCAGT 867
:||||||||||||
Db 14 SCTGGCTCCAGT 3

RESULT 535
AAL39576
ID AAL39576 standard; DNA; 15 BP.
XX
AC AAL39576;
XX
DT 05-SEP-2002 (first entry)
XX
DE SSTR4 gene polymorphism detecting primer SEQ ID No 23.
XX
KW Gene therapy; SSTR4 isogene expression modulator; hormone secretion;
KW somatostatin receptor 4; SSTR4; single nucleotide polymorphism; cancer;
KW gene therapy; SSTR4 isoform; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200226766-A2.
XX
PD 04-APR-2002.
XX
PF 27-SEP-2001; 2001WO-US030410.
XX
PR 27-SEP-2000; 2000US-0235826P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Bieglecki KM, Choi JY, Kliem SE, Koshy B;
XX
DR WPI; 2002-405043/43.
XX
PT New isolated polynucleotide, polymorphic variant of somatostatin receptor
PT 4 gene, useful for expressing somatostatin receptor 4 protein isoform
PT used in drug screening techniques.
XX
PS Claim 14; Page 14; 83pp; English.
XX
CC The invention is an isolated polynucleotide having a somatostatin
CC receptor 4 (SSTR4) isogene that is one of 13 somatostatin genes as given
CC in the specification, where each somatostatin gene has specific regions
CC of a fully defined sequence of 9190 nucleotides as given in the
CC specification, and is defined by polymorphisms at positions 3922, 4723,
CC 4754, 4783, 4835, 4874, 4921, 4948, 4986, 5216, 5329 or 5411. The
CC isolated polypeptide is useful for screening drugs which involves
CC contacting the polypeptide with a candidate agent and assaying for
CC binding activity. The isolated polynucleotide is useful for studying
CC expression and function of SSTR4 and expressing SSTR4 protein for use in
CC screening for candidate drugs to treat diseases related to SSTR4
CC activity. The polymorphism and haplotype data is useful for validating
CC whether SSTR4 is a suitable target for drugs of cancer and disorders
CC related to defects in hormone secretion, screening for such drugs and
CC reducing bias in clinical trials of such drugs. The polynucleotide is
CC also useful in gene therapy. The isolated polypeptide is useful in
CC studying the effect of variation on the biological activity of SSTR4 as
CC well as on the binding affinity of candidate drugs targeting SSTR4 for
CC treatment of cancer and disorders related to defects in hormone
CC secretion. The isolated polypeptide is useful in a variety of drug
CC screening assays to identify agents that bind specifically to all known
CC SSTR4 isoforms, and for measuring the binding affinities of one or more
CC candidate drugs targeting the SSTR4 protein. Predicting a haplotype pair
CC for SSTR4 gene of an individual is useful for identifying an association
CC between susceptibility to a disease, staging of a disease, or response to
CC a drug. This polynucleotide sequence represents a preferred primer for
CC detecting SSTR4 gene polymorphisms relating to the invention
XX
SQ Sequence 15 BP; 1 A; 3 C; 2 G; 8 T; 0 U; 1 Other;

Query Match 2.9%; Score 11.6; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 834 TTTTCTTCTCTG 845
||||||||||:|
Db 4 TTTTCTTCTCYG 15

RESULT 536
ABL39417
ID ABL39417 standard; DNA; 15 BP.
XX
AC ABL39417;
XX
DT 22-APR-2002 (first entry)
XX
DE Human ETFB allele-specific oligonucleotide probe 4.
XX
KW Human; electron-transfer flavoprotein beta polypeptide; ETFB;
KW electron acceptor; mitochondrial matrix; glutaric acidaemia type II;
KW novel polymorphic site; novel polymorphism; ETFB genotype; ss; GAII;
KW ETFB haplotype; transgenic animal; primer; probe; chromosome 19q13;
KW primer-extension oligonucleotide; single nucleotide polymorphism; SNP.
XX
OS Homo sapiens.
XX
PN WO200202580-A2.
XX
PD 10-JAN-2002.
XX

PF 05-JUL-2001; 2001WO-US021306.
XX
PR 05-JUL-2000; 2000US-0215984P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Bentivegna SC, Bieglecki KM, Kazemi A, Koshy B;
XX
DR WPI; 2002-154722/20.
XX
PT Novel isolated human electron-transfer-flavoprotein, beta polynucleotide,
PT useful for therapeutic purposes, for studying the expression and function
PT of the polynucleotide, and for expressing the flavoprotein.
XX
PS Claim 17; Page 14; 143pp; English.
XX
CC The invention comprises DNA, cDNA and protein sequences of the human
CC electron-transfer flavoprotein, beta polypeptide (ETFB) gene (located on
CC chromosome 19q13.3-13.4). The invention specifically relates to the
CC identification of 27 novel polymorphic sites within the ETFB gene.
CC Electron-transfer flavoprotein (ETF) is an obligatory electron acceptor
CC for nine primary flavoprotein dehydrogenases and is located in the
CC mitochondrial matrix. ETF is composed of an alpha (ETFA) and a beta
CC (ETFB) subunit. Electrons accepted by ETF are transferred to the
CC mitochondrial respiratory chain by ETF dehydrogenases (ETFDHs).
CC Deficiency of ETF or ETFDH leads to glutaric acidaemia type II (GAII).
CC Therefore ETFB is a pharmaceutically-important gene in the treatment of
CC GAII. The novel ETFB polymorphisms identified in the invention are useful
CC for genotyping and haplotyping the ETFB gene of an individual. The ETFB
CC protein and nucleic acids of the invention are useful for studying the
CC expression and function of ETFB in vivo. The ETFB protein and nucleic
CC acids are also useful for testing the efficacy of therapeutic agents and
CC compounds for glutaric acidaemia type II. The nucleic acids of the
CC invention are useful in the production of a transgenic animal expressing
CC the ETFB gene. Nucleic acids ABL39414-ABL39440 represent claimed ETFB
CC allele-specific probes. Nucleic acids ABL39441-ABL39494 represent claimed
CC ETFB allele-specific PCR primers. Nucleic acids ABL39495-ABL39548
CC represent claimed ETFB primer-extension oligonucleotides
XX
SQ Sequence 15 BP; 0 A; 5 C; 2 G; 7 T; 0 U; 1 Other;

Query Match 2.9%; Score 11.6; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 833 CTTTTCTTCTCT 844
||||:|||||||
Db 4 CTTTYCTTCTCT 15

RESULT 537
ABK72358/c
ID ABK72358 standard; DNA; 15 BP.
XX
AC ABK72358;
XX
DT 30-JUL-2002 (first entry)
XX
DE Human HTR5A gene allele-specific oligonucleotide probe #20.
XX
KW Human; 5-hydroxytryptamine receptor 5A; HTR5A; serotonin; probe; ss;
KW neuroprotective; neurological disease; depression; epilepsy;
KW gene therapy; single nucleotide polymorphism; haplotype pair;
KW chromosome 7q36.1.
XX
OS Homo sapiens.
XX
PN WO200222887-A1.
XX
PD 21-MAR-2002.
XX
PF 17-SEP-2001; 2001WO-US029210.
XX
PR 15-SEP-2000; 2000US-0233051P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Kazemi A, Koshy B, Sanchis A, Tirrell C;
XX
DR WPI; 2002-393978/42.
XX
PT Novel genetic variants of 5-Hydroxytryptamine (Serotonin) Receptor 5A
PT isogenes, useful for improving efficiency and reliability in drug
PT development for treating neurological diseases.
XX
PS Claim 17; Page 14; 134pp; English.
XX
CC The invention relates to single nucleotide polymorphisms in the gene
CC encoding human 5-hydroxytryptamine (serotonin) receptor 5A (HTR5A). A
CC method for haplotyping the HTR5A gene in an individual comprises
CC identifying the nucleotide at one or more polymorphic sites and
CC determining whether one of the copies of the gene is defined by one of
CC the HTR5A haplotypes given in the specification or whether both copies
CC are defined by a haplotype pair. This method is useful in genotyping,
CC whereby all possible haplotype pairs can be assigned to specific
CC genotypes. An association between a trait and a haplotype or haplotype
CC pair of the HTR5A gene can be identified by comparing the frequency of
CC the haplotype or haplotype pair in a population exhibiting the trait with
CC the frequency of the haplotype or haplotype pair in a reference
CC population, where a higher haplotype frequency in the trait population
CC indicates the trait is associated with the haplotype or haplotype pair.
CC HTR5A and its corresponding DNA are used for studying the expression and
CC function of HTR5A, and in screening for candidate drugs to treat diseases
CC related to HTR5A activity, such as neurological disorders, including
CC depression and epilepsy. Sequences ABK72339-ABK72358 represent allele-
CC specific oligonucleotide probes used for detecting HTR5A gene
CC polymorphisms
XX
SQ Sequence 15 BP; 2 A; 6 C; 5 G; 1 T; 0 U; 1 Other;

Query Match 2.9%; Score 11.6; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 776 TGAGGGCAGCCC 787
|||||||:||||
Db 15 TGAGGGCRGCCC 4

Search completed: March 8, 2004, 14:05:19
Job time : 5 secs